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## EDITORIAL COMMENT

Within a year of returning to the U.K. from two years of anthropological fieldwork in the Andes, I had entered into general medical practice in rural East Anglia. During the time in Peru I had experienced the traumatic but exhilarating process, shared by all anthropologists studying foreign cultures, of learning an alternative conceptual framework for structuring the perceived phenomena of the world around me and the effects of my participation in it. In the field of illness in particular, I had learned to order my observations into an alternative set of categories which were logically coherent, capable of sophisticated theoretical manipulation, and validated by their predictive qualities. The aetiological and diagnostic concepts of cosmopolitan medicine instilled into me during my medical training could not be suppressed, and I had come to find myself operating simultaneously with two sets of categories—those of cosmopolitan medicine and those of Andean medicine.

That was predictable enough, but what I had not expected was the ease with which the categories of Andean medicine were applicable to the problems of my patients in the consulting room in the U.K. Without premeditation I diagnosed my patients' complaints in terms of *susto*, *veta* or *colerina* simultaneously with gastro-enteritis, ischaemic heart disease or anxiety state. I almost regret that I lacked the courage to pursue Andean therapeutic regimens, but infusion of *ichu tullma* does not figure in the British Pharmacopoeia and I fear that my patients would not take kindly to lying naked on my examination couch while I massaged their bodies with a live guinea pig! However, the important point here is that I was not translating directly between the two systems, for there does not exist a simple one-to-one relationship between the diagnostic categories of cosmopolitan medicine and those of Andean medicine. Each system arises from a quite separate view of reality, a different theory of physiology and a different aetiology. The two systems of thought are not in conflict; both are applicable simultaneously but separately to the same illness phenomena.

Daily in my consulting room I am confronted by another contrasting view of the illness situations presented, this one coming from the patients. Their descriptions of their complaints reveal a set of concepts quite foreign to cosmopolitan medicine. They speak in terms of "a chill" which may be general in its effect on the body or centred on some specific organ such as the stomach or kidneys, of a state of "biliousness", "indigestion", "eye strain", "fibrositis".

The familiarity of such ideas blinds many physicians to the fact that they are rooted in a system of folk medical concepts and are alien to the cosmopolitan medical system. It is so easy to translate from a patient's description of himself as "bilious" into the attendant symptoms of nausea, anorexia, abdominal discomfort and maybe eructation, before reassembling them along with the physical signs elicited by examination into a diagnostic category of cosmopolitan medicine, that most physicians perform the translation unconsciously. This facility of translation is one of the advantages arising from a common cultural background shared by physician and patient; it becomes more apparent by its absence and the accompanying difficulties encountered when, for example, a physician of Western culture is consulted by a patient of West Indian or Indian culture.

It is not only in the Andean or other cross-cultural setting that the physician operates simultaneously with two distinct sets of medical concepts, even though in his own cultural setting he may do it unconsciously. In recent years increasing attention has been paid to the cross-cultural situation and a growing volume of published literature, mainly from the U.S.A., deals with the contrasting conceptual systems employed by the parties to cross-cultural medical consultations. But little attention has been paid to the folk medical concepts of the dominant cultural groups in European and North American society.

It is possible that the adoption by folk medical systems of many terms derived from cosmopolitan medicine has led to the assumption that the folk system is becoming acculturated by a process of "public education", but it must not be assumed that identical terms have identical referents in the two systems. The little work that has been published on this topic indicates that borrowed terms in the folk medical system have significantly different referents from when used in the cosmopolitan medical system, e.g. when a patient speaks of "rheumatism" he is not usually referring to one of the rheumatic diseases recognised by doctors.

Here is a field ripe for ethnographic harvesting, with readily accessible informants in every research worker's own neighbourhood. It is probable that investigation would not reveal the extensive and logically coherent body of folk medical concepts which have excited anthropologists in many less complex societies; but it is certain that knowledge of folk medical concepts in our own society is not only of interest in relation to understanding of our culture as a whole, it is also of direct and immediate relevance to the practice of medicine. Perhaps during this period when finance for investigations in more remote and exotic societies is not so readily available we may see more research effort directed into this important field.

I. NEIL STEVENSON

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## REIFICATION AND THE CONSCIOUSNESS OF THE PATIENT

MICHAEL T. TAUSSIG

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**Abstract**—The signs and symptoms of disease do something more than signify the functioning of our bodies; they also signify critically sensitive and contradictory components of our culture and social relations. Yet, in our standard medical practices this social "language" emanating from our bodies is manipulated by concealing it within the realm of biological signs. I try to show this by means of a patient's interpretation of the meaning of her illness. This case study illustrates that in denying the human relations embodied in signs, symptoms, and therapy, we mystify those relations and also reproduce a political ideology in the guise of a science of physical things. This I call *reification*, following Karl Marx's analysis of the commodity and Georg Lukács' application of this analysis to the interpretation of capitalist culture and its mode of objectifying social relations. I argue that in sustaining reification, our medical practice invigorates cultural axioms as well as modulating the contradictions intrinsic to our culture and views of objectivity. In this way disease is recruited into serving the ideological needs of the social order, to the detriment of healing and our understanding of the social causes of misfortune.

### THE MARXIST PROBLEM: REIFICATION

By means of a cultural analysis of an illness and its treatment in the USA in 1978, I wish to direct attention to the importance of two problems raised by Marxism and by anthropology concerning the moral and social significance of biological and physical "things". I am going to argue that things such as the signs and symptoms of disease, as much as the technology of healing, are not "things-in-themselves", are *not only* biological and physical, but *are also* signs of social relations disguised as natural things, concealing their roots in human reciprocity.

The problem raised by Marxism comes from the famous essay of Georg Lukács published in 1922 entitled "Reification and the Consciousness of the Proletariat", an essay which had explosive impact on the European Communist movement, in good part due to its critique of "historical materialism" as developed by Engels, Lenin, and the theoreticians of the German Social Democrat Party. In essence, Lukács charged that the concept of objectivity held by capitalist culture was an illusion fostered by capitalist relations of production and that this concept of objectivity had been thoughtlessly assimilated by Marxist critics who were, therefore, upholding basic categories of the social form they thought they were impugning. Lukács attempted to construct a critical sociology of bourgeois knowledge which assailed the very theory of knowledge or epistemology which he felt was basic to capitalist culture. The Kantian and neo-Kantian antinomies between "fact" and "value", as much as the empiricist copy-book theory of knowledge sharply dividing "objectivity" from "subjectivity", were, in Lukács opinion, tools of thought which reproduced capitalist ideology (even if they were deployed within a so-called "historical materialist" framework of analysis). The roots of the thought-form which took the capitalist categories of reality for granted were to be found, he argued, in what he called the "commodity-structure", and a chief aim of his essay was to

draw attention to the central importance of the analysis of commodities in Marx' portrayal and critique of capitalism. There was no problem in this stage of history, claimed Lukács, that did not lead back to the question of the commodity structure, the central, structural problem of capitalist society in all its aspects. Intrinsic to this problem lay the phenomenon of reification—the thingification of the world, persons, and experience, as all of these are organized and reconstituted by market exchange and commodity production. The basis of commodity-structure, wrote Lukács, "is that a relation between people takes on the character of a thing and thus acquires a 'phantom objectivity', an autonomy that seems so strictly rational and all-embracing as to conceal every trace of its fundamental nature: the relation between people" [1].

It is with the phantom-objectivity of disease and its treatment in our society that I am concerned, because by denying the human relations embodied in symptoms, signs, and therapy, we not only mystify them but we also reproduce a political ideology in the guise of a science of (apparently) "real things"—biological and physical thinghood. In this way our objectivity as presented in medicine represents basic cultural axioms and modulates the contradictions inherent to our culture and view of objectivity. Rather than expound further, I now wish to exemplify these all too abstract orienting premises by means of a concrete ethnographic analysis of a sickness. But before doing so, I have to draw attention to a problem raised by anthropology, namely by Evans-Pritchard's classic analysis of Azande witchcraft published in 1937 [2].

### THE ANTHROPOLOGICAL PROBLEM: THE BIOLOGICAL BODY AND THE SOCIAL BODY

It is surely a truism that the sense of self and of the body change over time and vary between different

cultures. In modern capitalist culture the body acquires a dualistic phenomenology as both a thing and my being, body and "soul". Witness Sartre's chapters on the body in *Being and Nothingness* [3].

Of course the physicians who have taken care of me, the surgeons who have operated on me, have been able to have direct experience with the body which I myself do not know. I do not disagree with them. I do not claim that I lack a brain, a heart, or a stomach. But it is most important to choose the order of our bits of knowledge. So far as the physicians have had any experience with my body, it was with my body in the midst of the world and as it is for others. My body as it is for me does not appear to me in the midst of the world. Of course during a radioscopy I was able to see the picture of my vertebrae on a screen, but I was outside in the midst of the world. I was apprehending a wholly constituted object as a this amongst other thises, and it was only a reasoning process that I referred it back to being mine; it was much more my property than my being.

As it oscillates between being my property and my being, especially when diseased, my body asks me questions which the physician never ask or answer: "Why me?", "Why now?" As Evans-Pritchard observed, these are the questions foremost in the Azande attribution of serious sickness or misfortune to witchcraft or sorcery—i.e. to the malevolent disposition of critically relevant social relationships. Science, as we understand it in our day and age, cannot explain the human significance of physical effects. To cite the common phraseology, science, like medical science, can explain the "how" but not the "why" of disease; it can point to chains of physical cause and effect, but as to why I am struck down now rather than at some other time, or as to why it is me rather than someone else, medical science can only respond with some variety of probability theory which is unsatisfactory to the mind searching for certainty and for significance. In Azande practice, the issues of "how" and "why" are folded into one another; aetiology is simultaneously physical, social, and moral. The cause of my physically obvious distress is to be located in my nexus of social relations involving someone else's unjustly called for malevolence. This property of my social nexus expresses itself in physical symptoms and signs. My disease is a social relation, and therapy has to address that synthesis of moral, social, and physical presentation.

There are two problems raised by this account. First, do patients in our society also ask themselves the questions that Azande do, despite the disenchantment of our age and its incredulity regarding witchcraft and sorcery? Second, have we not falsified Azande epistemology, following Evans-Pritchard, in distinguishing the "how" from the "why", "fact" from "value", and immediate from ultimate causes? Unless we firmly grasp at the outset that these are not the salient native distinctions but that they are ours which we necessarily deploy in order to make some sense out of a foreign epistemology, we will fail to appreciate what is at issue. The salient distinction to note is that in Azande epistemology there is a vastly different conception of facts and things. Facts are not separated from values, physical manifestations are not torn from their social contexts, and it requires therefore no great effort of mind to read social relations

into material events. It is a specifically modern problem wherein things like my bodily organs are at one instant mere things, and at another instant question me insistently with all too human a voice regarding the social significance of their dis-ease.

Paul Radin in his discussion of the concept of the self in "primitive" societies makes the same point. He suggests that the objective form of the ego in such societies is generally only intelligible in terms of the external world and other egos. Instead of the ego as a thing-in-itself, it is seen as indissolubly integrated with other persons and with nature. "A purely mechanistic conception of life," he concludes, "is impossible. The parts of the body, the physiological functions of the organs, like the material objects taken by objects in nature, are mere symbols, *simulacra*, for the essential psychical-spiritual entity that lies behind them" [4].

As it oscillates between being a thing and my being, as it undergoes and yet disengages itself from reification, my body responds with a language that is as commonplace as it is startling. For the body is not only this organic mosaic of biological entities. It is also a cornucopia of highly charged symbols—fluids, scents, tissues, different surfaces, movements, feelings, cycles of changes constituting birth, growing old, sleeping and waking. Above all, it is with disease with its terrifying phantoms of despair and hope that my body becomes ripe as little else for encoding that which society holds to be real—only to impugn that reality. And if the body becomes this important repository for generating social meaning, then it is in therapy that we find the finely gauged tuning whereby the ratification of socially engendered categories and the fabulation of reality reaches its acme.

In any society, the relationship between doctor and patient is more than a technical one. It is very much a social interaction which can reinforce the culture's basic premises in a most powerful manner. The sick person is a dependent and anxious person, malleable in the hands of the doctor and the health system, and open to their manipulation and moralism. The sick person is one who is plunged into a vortex of the most fundamental questions concerning life and death. The everyday routine of more or less uncritical acceptance of the meaning of life is sharply interrupted by serious illness which has its own pointed way of turning all of us into metaphysicians and philosophers, (not to mention critics of a society which leaves its sick and their families to fend for themselves). This gives the doctor a powerful point of entry into the patient's psyche, and also amounts to a de-structuration of the patient's conventional understandings and social personality. It is the function of the relationship between the doctor and the patient to restructure those understandings and that personality; to bring them back into the fold of society and plant them firmly within the epistemological and ontological groundwork from which the society's basic ideological premises arise. In modern clinical practice and medical culture, this function is camouflaged. The issue of control and manipulation is concealed by the aura of benevolence. The social character of the medical encounter is not immediately obvious in the way that it is in the communal healing rites of "primitive" societies. With us, consultation and healing occurs in privatized and individualistic



settings, and the moral and metaphysical components of disease and healing are concealed by the use of the natural science model.

As Susan Sontag has recently emphasized [5], while the symptoms and signs of disease usually have a decidedly and all too material quality, they are something else besides. We might say that they are social as well as physical and biological facts. We glimpse this if we reflect but for a moment on the vastly different meanings conveyed by signs and symptoms at different points in history and in different cultures. Fatness, thinness, blood in one's urine, let alone blood *per se*, headache, nightmares, lassitude, coughing, blurred vision, dizziness, and so forth, acquire vastly different meanings and significance at different times in history, in different classes of society, and so on. Two points are raised here. The manifestations of disease are like symbols, and the diagnostician sees them and interprets them with an eye trained by the social determinants of perception. Yet this is denied by an ideology or epistemology which regards its creations as really lying "out-there"—solid, substantial things-in-themselves. Our minds like cameras or carbon paper do nothing more than faithfully register the facts of life. This illusion is ubiquitous in our culture, is what Lukács means by reification stemming from the commodity-structure, and medical practice is a singularly important way of maintaining the denial as to the social facticity of facts. Things thereby take on a life of their own, sundered from the social nexus that really gives them life, and remain locked in their own self-constitution.

Today in various nooks and crannies called consultation rooms, diagnosticians listen for the same elements and when they find them they do not say, I can put these things together and call them hysteria if I like (much as a little boy can sort his marbles now by size, now by colour, now by age); rather, the diagnostician, when he has completed his sort says: This patient is a hysteric! Here, then, is the creator denying authorship of his creation. Why? Because in turn he receives a greater prize; the reassurance that out there is a stable world; it is not all in his head [6].

What is revealed to us here is the denial of authorship, the denial of relationship, and the denial of the reciprocity of process to the point where the manifold armory of assumptions, leaps of faith and *a priori* categories are ratified as real and natural. In another idiom, the arbitrariness of the sign is disconfirmed and no longer seen as arbitrary because it is affixed in the patient, therewith securing the semiotic of the disease *langue*. And if the diagnostician is thereby reassured as to the reality of the world as thinghood writ large, and by this dispenses with the discomfort of being at too close quarters with the reality of what is but the social construction of reality, it is not that it is 'all in his head' but that it is all in the relationship of physicians and patients which is at stake. The relationship is worked over and sundered. Reciprocity lies victim to the assault performed on it. Likewise, the patient and the concept of disease have been recruited in the service of building a reality whose stability, which cannot be denied so long as professional expertise bears down, is nevertheless prone to violent alterations as the pressure of denied authorship and reciprocity makes its presence felt. This presence of denial

is itself masked by the illusion of reciprocity of a different sort; the niceties of style in the bedside manner and the culture of caring. Foucault directs our attention to this in his discussion of changes in psychiatry, in terms that apply to all of modern clinical science:

Madness no longer exists except as *seen*. The proximity instituted by the asylum, an intimacy neither chains nor bars would violate again, does not allow reciprocity: only the nearness of observation that watches, that spies, that comes closer in order to see better, but moves ever further away, since it accepts and acknowledges only the values of the Stranger. The science of mental disease... would not be a dialogue... [7].

Because it does this, medical practice inevitably produces grotesque mystifications in which we all flounder, grasping ever more pitifully for security in a man-made world which we see not as social, not as human, not as historical, but as a world of *a priori* objects beholden only to their own force and laws, dutifully illuminated for us by professional experts such as doctors. There are many political messages subtly encouraged by all of this for those who become patients, and we all become patients at some time, and we are all patients in a metaphorical sense of the social "doctors" who minister our needs. Don't trust your senses. Don't trust the feeling of uncertainty and ambiguity inevitably occurring as the socially conditioned senses try to orchestrate the multitude of meanings given to otherwise mute things. Don't contemplate rebellion against the facts of life for these are not in some important manner partially man-made, but are irretrievably locked in the realm of physical matter. To the degree that matter can be manipulated, leave that to "science" and your doctor.

#### THE PATIENT

By way of illustration (rigorously preserving the anonymity of the people and organizations involved) I want to discuss the situation of a 49 years-old white working class woman with a history of multiple hospital admissions over the past 8 years with a diagnosis of polymyositis—inflammation of many muscles. According to medical authority, this is a fatal chronic disease consisting in the progressive deterioration of muscle. Classified as a rheumatoid disease of unknown cause, treatment consists largely in the administration of heavy doses of steroids at the times when the disease waxes in order to decelerate the inflammation. I met her in the wards of a prestigious teaching hospital in 1978, where we talked for some 4 hr on five occasions. I introduced myself as a physician and anthropologist, interested in patients' views of sickness.

She described her condition as disease of the muscles. They deteriorate, and it's terminal. It is a terrible tiredness, she says, which comes and goes in relation to stress. What worries her is being without control during the acute phases. As she puts it, the switch to her body, between her mind and body, becomes switched off. The attic is cut off from the basement. When she gives examples, it is always in situations where she is working for others; washing the dishes for example. When asked what she thought

might be the cause of her disease, it turned out that she constantly asked herself why she had it, never stopped asking herself "why?"; "Why me, Oh Lord, why me?"

Her search for explanation and meaning remains dissatisfied with what the medical profession offers. As we shall see, she demands a totalizing synthesis which she herself provides by reading contradictory cultural themes into her symptoms, signs, and progress. These contradictions are exhibited by her reactions to the *obiter dicta* of medical professionals, to the patterns of discipline enforced by the hospital, and to the conflicts systematically coursing through society in general. Moreover, her mode of understanding and explanation runs counter to the master paradigms in our culture which dichotomize mind from matter, morality from physical determinism, and "things" from the social context and human meaning in which they inhere. In being foreign to accepted cultural consciousness in these crucial ways, her attempts to provide a synthetic understanding of physical things cannot but be tensed and prone to instability.

Her first response was to say that the cause of her condition is "an unhappy reason". At the age of 15 and contrary to her mother's desire, she married a factory worker who soon became unable to support her and the five children born in the following 5 years due to his alcoholism. She had a tubal ligation followed shortly thereafter by a re-statement, and then six more pregnancies all resulting in miscarriages. She took in washing, ironed, and gleaned garbage for bottles which she sold. There was rarely money sufficient for food and she was constantly exhausted and hungry. She would go without food in order to give it to the children who were frequently sick. In turn, she caught many of their sicknesses, because she was so weak and tired. Life was this endless round of poverty, exertion, exhaustion, and sickness. "Surely that could cause polymyositis," she says. "You can take a perfect piece of cloth and if you rub it on the scrub board long enough, you're going to wear holes in it. It's going to be in shreds. You can take a healthy person and take away the things that they need that are essential, and they become thin and sickly. So I mean... it all just comes together." She has never approached her doctors with this idea because "They would laugh at my ignorance. But it does seem right; that tiredness and work all the time. Take the children of India without enough food, dragging their swollen bellies around, tired and hungry. Surely they could have this disease too. Only because they haven't got hospitals, nobody knows it."

In making these connections, the patient elaborates on the connection she has in mind between polymyositis as muscle degeneration and her life-experience of oppression, of muscular exertion, and of bodily sacrifice. What seems especially significant here is that the causes she imputes as well as her understanding of the disease stand as iconic metaphors and metonyms of one another, all mapped into the disease as the arch-metaphor standing for that oppression. This could well form the highly charged imagery leading to a serious critique of basic social institutions. But, as we shall see, other aspects of the situation mitigate this potentiality.

She then went on to develop the idea that there also exists an hereditary or quasi-hereditary causal factor. In her opinion, one of her daughters is possibly afflicted with the disease, and two of that daughter's daughters also. She feels extremely close to this daughter, to the point where she maintains that there is a mystical attachment between them, of Extra-Sensory Perception, as she says. Even when they are far apart physically, each one knows what is happening to the other, especially at a time of crisis, when they come to each other's aid. She elaborates on the concept that the disease is present in this matriline, manifesting itself in four distinct stages correlated to the four ages of the four females involved. In passing, it is worth noting that the males in the family history come in for little mention with the exception of her first husband who is seen as a destructive and even evil figure. Her immediate social world is seen by her as centered on the history of four generations of women, beginning with her mother who raised the family in dire poverty. This characteristic matriline or reciprocating women in the networks of working class families is in this case vividly expressed by the mystical closeness she feels for her daughter, and by the mapping of these social relations into the disease as a metaphor of those relations.

The fact that the youngest granddaughter involved was seriously ill when a few months of age, and that the doctors found an "orgasm" in her blood, suggests to the patient the possibility that a foreign-agent or bacterial aetiology plays a part too; the foreign-agent disappearing into the body to slowly develop the full-blown presentation of the disease at a later date. The attribution of disease to a foreign-agent would seem as old as human-kind. But only with modern Western medicine and the late nineteenth century "germ theory of disease" did this idea largely shed itself of the notion that the foreign-agent was an expression of specific social relations. In this patient's case, however, the foreign-agent aetiology is systematically woven into the fabric of her closest relationships and metaphorically expresses them.

Finally, the patient develops the idea that God stands at a crucial point in the causal complex. She mentions that God gave her this disease in order to teach doctors how to cure it—a typical resolution of the oppositions redolent in her account of passivity and activity, receiving and giving, crime and sacrifice. She notes that in the Bible it is said to seek first and then go to the Lord, meaning, she says, go first to the medical profession and then try out religion. It is this long march that she has indeed put into practice as much as in her working through a theory of aetiology. At this stage of our discussion, she summarized a good deal of her position thus.

"You see, protein builds muscle and yet my children were lucky if they got protein once a month, and I was lucky. Now I have polymyositis, plus the arthritis, and my daughter has arthritis of the spine, and her little daughter is affected by it, has inherited it, plus her younger daughter yet. Now there seems to be a pattern there. You see I was deprived of it and my children were deprived of it and we've both come down with a chronic disease. We're not too sure that she doesn't have polymyositis. The breakdown of the muscles and the tissues due to strain and work were

weakened by the fact that you didn't have enough protein and so on, so that when the bug comes along, you are a prime target for it! ... God gives us a free will. I went very much against God's will ... when I went out and got married at 15, stomped my feet and told my mother I'd go out and get pregnant if she didn't let me marry the boy. I don't believe that God gave me the disease, but he *allowed* ... me to get the disease. He suffered me over many mountains. And on the same hand, I was in the perfect situation for contracting the disease or for the development of the disease whether it's hereditary or catching ... nobody knows yet ... Does that make sense? When I'm laying quietly thinking ... the train of thought goes along and you wonder why? You know; Oh why me Lord? Why all the ups and downs? But it's not God's fault that I got sick; it's the fault of the environment I lived in! Now, with God's help which I hadn't asked for at that time, I could have overcome many of my hardships but I was too proud! And we have to be humble before God ... So you see our environment has very much to do with our health and with our mental outlook on life ... it has everything to do ... our morals and clean living, a proper diet ... all these things they all go together ... they all fit into a neat little puzzle if you sit long enough and look at them right. You have a neat little puzzle that all fits very neatly together ...".

This moving passage calls for far larger commentary than I can make here. Her concern with the meaning and especially with the moral meaning of her illness stands out, reinforcing the argument that behind every reified disease theory in our society lurks an organizing realm of moral concerns. In her case, God is by no means seen as the prime or even ultimate cause of her disease. Rather, it is the moral quality of her actions, in going against her mother and so on, and the moral actions of her husband, which offended the moral code embodied in God's directives, that determined which way the potentialities inherent to her material situation or environment would develop. The elegant simplicity of Evans-Pritchard's exegesis and solution of Azande epistemology into "mystical", "scientific", and "empirical" categories, as a way of bridging their belief system with ours, becomes of dubious value. It is hard here to see a simple chain of causes stretching from ultimate to immediate, along the lines suggested by Evans-Pritchard for the Azande. Instead, we are presented with a system of internal relationships, a series of encysting and encysted contingencies permeating each other's potentials drawn into one grand pattern—or, rather, into "one neat little puzzle that all fits very neatly together".

In so far as modern medical practice ostensibly focuses exclusively on the "how" of disease, and reifies pathology in doing so, it might appear to be performing a rather helpful and healthy maneuver in expunging guilt. But as the situation so movingly reveals, nothing could be further from the truth. Through a series of exceedingly complex operations, reification serves to adhere guilt to disease. The real task of therapy calls for an archaeology of the implicit in such a way that the processes by which social relations are mapped into diseases are brought to light, de-reified, and in doing so liberate the potential for dealing with

antagonistic contradictions and breaking the chains of oppression.

### *Professionalism and reification*

In talking about her relationships with other sick people in the ward, the patient noted that "I couldn't have survived without the help of the other patients these eight weeks". She dwelt on the fact that hospitalization drew patients to one another in very personal and usually sympathetic ways. "I really do think you have a better understanding of people and their likes, dislikes, and their personalities here. Being sick gives you a tolerance for other people's faults. You really have a better bond because that person already knows your faults. You know. You don't have to put on a false face. These are things that, uh, a doctor naturally doesn't have time to sit down and think about ... They don't feel the pain. They give an order what to do but they don't feel the pain. So they really don't know what type of hazard you're going through."

She has made firm friendships with patients whom she now visits when out of hospital, but with the staff "it's different because naturally your doctor and your nurse have your medical part to think of. Where we lay here and we talk about our families and the things we like to do or the things we like to eat, you become on a more intimate basis. It's ... the professional part is gone. But your doctor is still ... even though he's becoming more lenient in his ways, I believe he's still got to keep the upper hand professionally."

Following her statement that she couldn't have survived the past 8 weeks if it hadn't been for the other patients, she goes on to discuss her physical therapy. "You see I can't walk. I'm just now learning all over again from my illness. You have to learn. You have to relearn to take one step at a time ... like a child. I've been confined solely to this bed. If my tray had been left over there by the nurse ... her mind is on another medical problem that she's got to face next. But Becky who's lying in the bed next to me can get up and move over and get my stuff where I can reach it. Or ... if I can't reach my light, she'll turn her light on for me and then tell them who needs service. Now I'm able to stand if you give me the proper instructions, and, and ... but you see I'm re-educating all the muscles and Becky couldn't help me there. Where see the professional, your young professional girl is trained to teach ... On the other hand the professional couldn't give me the personal attention that Becky has given me. Something just as simple as pulling the curtains back so that I can see more than just a curtain and the white ceiling. I can't get up to do it myself, but Becky can. Your friendship and your mutual understandings, you know, you really get to know a person whether they're kind or really interested in you. Such as I spoke every morning very kindly to this elderly lady (in the opposite bed). I know she can hear me but she wants absolutely nothing to do with me. She's far above me. I take it she has money. Her daughter is a doctor. She wants nothing to do with me and yet I haven't hurt her ... I don't have any small children, but Becky does and I've gone through the things she is now going through so we have mutual interests. I'm the grandmother of 19."



I ask her why another patient couldn't help her walking. She replies. "Because she would teach you *wrong*, when a professional already knows and has evaluated your muscle strength. And there, uh, you know automatically that you can trust the nurse. But Becky hasn't been taught how to grab me or stabilize me... or to tell me which muscle to use to keep myself from collapsing. So, see, she can't help me professionally. So our whole friendship has to be on a... on a I like you and you like me basis. That technician still has her mind working on far beyond mine. Mine is strictly in trying to accomplish what she has already learned and knows."

I ask; "But say the professional teaches you to walk backwards and forwards between a couple of things several times a day. Couldn't someone like Becky who isn't bedridden help you to exercise?"

"No! Because she doesn't know the extent of your energies."

"But the professional does?"

"The professional has to figure this out before she starts the exercises."

"You yourself wouldn't know the capacity of your own energy so you could tell?"

"No! No!"

Here the loss of autonomy to which Ivan Illich refers in his book *Medical Nemesis* is strikingly expressed [8]. The potential within the patient as much as that which exists between patients for developing a therapeutic milieu is agonizingly cut short. The relationship with other patients becomes almost purely "expressive", while the relationship with the professionals becomes purely "instrumental". As each type of relationship is driven to its extreme in pure subjectivity and pure objectivity, so each is threatened with self-destruction as it teeters on expressiveness without substance, and instrumentation without expression or participation. The replication of our cultural epistemology into subject-hood and object-hood is here presented in its most naked form. The same epistemology is also replicated in the patient's understanding, reinforced by the professionals, of the workings of her body; namely the structure and function of musculature. As opposed to an organic conception of the inner dialectical interplay of muscles with one another and with thought and will, here muscle function is conceived of atomistically, separate from mind and will, and each muscle is objectified as something separate from the synergistic interplay of musculo-skeletal holism. And in her regarding the professional as knowing better than she as to the extent of her energies, we may well regard the alienation of her own senses as complete, handed over to the professional who has become the guardian or banker of her mind.

This splitting of subjectivity from objectivity as represented by patient-good and professionalism, respectively, resulting in the capturing of her subjectivity by the professional, is as much a result of the patients' inability to develop the mutual aid potential still present in the patient sub-culture as it is due to the relationship between professional and patient. The former derives from the latter, and both contrast strikingly with the social relations and culture described by Joshua Horn for the Chinese hospitals in which he worked from 1954 to 1969.

The patients often select representatives to convey their opinions and suggestions to teams of doctors, nurses and orderlies who have day-to-day responsibility in relation to specific groups of patients. These teams meet daily to plan the day's work. Ambulant patients play an active part in ward affairs. They take their meals in the ward dining-room and many of them help patients who are confined to bed, reading newspapers to them, keeping them company and becoming familiar with their medical and social problems. I conduct a ward round in a different ward each day and as I do so, I usually collect a retinue of patients who go with me, look and listen and often volunteer information [9].

The alienation of the patient's self-understanding and capacity is all the more striking when we learn that she has extensive practical experience with physical therapy and that out of the hospital context and away from the aura of professionals, she does in fact regard herself as skilled and powerful in this regard. Speaking about her sprained knee suffered some years back she says, "And then I had to learn to walk again. I'm always learning to walk! I really ought to be well-trained. I could be a therapist... I trained my daughter after she had polio. And they refused to take her at the polio center. I taught her to walk. Her left side was paralyzed (the same side that the patient always refers to as her weak and occasionally almost paralyzed side)... I learnt from a friend. I used to have to get up and I'd sit on top of her and stretch her hamstrings and stretch her arm muscles and things and it was 3 months before I got any response at all. And then one night when I was stretching her hamstrings she screamed because she said that it hurt too much. Well I sat down and had a good cry. Mother couldn't even continue therapy that night. And from then on, the more it hurt, the more therapy I gave her. And the year from the day that they told me she'd never walk again, I walked back in to the doctor and I showed her what one person could do with God's help. You have to be gentle. And this comes from love, compassion, and the desire to help another human being. And you'd be surprised how really strong my hands are I never lose the strength of my hands. I don't know why. But through all of this I have never completely lost my... my hands."

So, we are faced with a contradiction. And this contradiction is just as much present in the hospital situation and in the professional-patient relationship so that the loss of autonomy and the cultural lobotomization is never complete. For a few days later the patient refused what was considered an important part of her treatment, just as during an earlier stay in hospital she created a wild scene by throwing her coffee on the floor when the staff refused to give her more medication for pain.

On this earlier occasion she insisted that her pain was increasing. The staff regarded this as "secondary gain". The nurses' plan was to "give support and reassurance; allow the patient to express her feelings. Monitor emotion regarding status and shift". It is, of course, this mode of perception—"monitor emotion..."—which so tellingly contrasts with the type of observation that passes between patients, and which should be referred back to my earlier citation from Foucault, the perception which

does not allow of reciprocity: only the nearness of an observation that watches, that spies, that comes closer in order to see better, but moves ever further away, since it accepts and acknowledges only the value of the Stranger.

Following the innovation and supposedly more humane "problem-oriented approach", which is now also taught to medical students, the nurses' progress notes are written up in the form of the different problems the patient has. Each problem is then analysed into four parts in accord with the S.O.A.P. formula: Subjective (the patient's perception), Objective (the nurse's observation), Analysis (interpretation of data), and Plan. Soap—the guarantee of cleanliness and the barrier to pollution! Subjectivity, objectivity, analysis, and plan! What better guarantee and symbolic expression could be dreamt of to portray, as if by farce, the reification of living processes and the alienation of subject from object? And, as one might suspect, this formulation is congruent with the need for computerizing records and more rationally preparing safeguards against malpractice suits. The Plan? "Give support and reassurance. Relate feelings of trust." How much does this packaging of "care", "trust", and "feelings", this instrumentation of what we used to think of a spontaneous human transitivity and mutuality, cost, according to Blue Cross?

A few days later, the patient complained of more pain, and of her inability to urinate (although according to the nursing staff she could urinate). The night following she became angry and threw her coffee at a nurse who then called a doctor. He reported: "Patient had a significant episode of acting out. Accused nursing personnel and myself of lying and disrespect. Extremely anxious and agitated. Crying. Had thrown a cup of coffee at the R.N. (Registered Nurse). Patient refused to acknowledge any other precipitating event or underlying emotion. Husband arrived and calmed patient down. Psychiatric recommendation with Dr Y and began initiating dose of Haloperidol. Will also add 75 mg/day amitriptyline for apparent on-going depressive state with anxiety." (Haloperidol is described by Goodman and Gillman [10] as a drug which calms and induces sleep in excited patients. Because it produces a high incidence of extrapyramidal reactions it should be initiated with caution.) This is the first time that the doctor's notes mention that the patient is distressed, although the nurses' notes chart her increasing dissatisfaction going back over several days. The nurse's report of the same incident leaves out, for the first time, the S (subjective category) and goes straight to Objectivity: "Patient was so upset when she was told that somebody said that she can get out of bed and use the bedside commode. She said that nurse is...and for her anger threw her cup of coffee on the floor. Crying and wants her husband to be called because she's very upset. Saying dirty words." Analysis: "Patient is very upset". Plan: Dr X notified and patient was told to calm down since she's not the only patient on the floor, that others are very sick and upset from her noise. Patient claims that she is not sick. Patient quiets down when her husband came and friendly to the nurses." The next day the doctor's notes say that the patient is quite angry and that her anger takes the form of sobbing and threatening to leave hospital and

warn friends about care here. The day after that, the nurses report that the chaplain talked to the patient for half an hour so she'll be able to release all her tensions, anxiety, and conflict. The chaplain said that she's angry of something. The Plan notes that the chaplain will come every day and that she's a bit nicer to the staff and courteous when she needs something. The doctor's notes describe the patient as "stable" and thereafter never mention her scene. The nurse's report says that she is still complaining of pain, Subjective category, and requesting pain medication, Objective category. As for her "anxiety problem" the Objective entry says "she is talking about how people don't believe she can do nothing for herself." And the next day she went home.

It is surely of some importance that the patient was examined (*sic*) by a psychiatrist the morning of the same day when she later threw her coffee (on the floor, according to the nurses; at a nurse, according to the doctor). The nurses' report noted that she was crying and trembling following the visit of the psychiatrist, whose own report says that the "evidence is strongly suggestive of an organic brain syndrome". She said it was January when it was December. The psychiatrist had just wakened her. She "demonstrated some looseness of associations", "at times was difficult to follow as she jumped from topic to topic", and on serial subtractions from 50 she made three errors. Having stated that the evidence was strongly *suggestive* of an organic brain syndrome (i.e. a physical disease of the brain) the psychiatrist in his Recommendations wrote: "Regarding the patient's organic brain syndrome..." In other words, what was initially put forward as a suggestion (and what a suggestion!) now becomes a real thing. The denial of authorship could not be more patent.

The significance of this episode is that apart from illustrating yet another horror story of hospitalization it reveals how the clinical situation becomes a combat zone of disputes over power and over definitions of illness and degrees of incapacity. The critical issue centers on the evaluation of incapacity and of feelings, such as pain, and following that on the treatment necessary. Here is where the professionals deprive the patients of their sense of certainty and security concerning their own self-judgement.

By necessity, self-awareness and self-judgement require other persons' presence and reflection. In the clinical situation, this dialectic of self and other must always favor the defining power of the other written into the aura of the healer who must therefore treat this power with great sensitivity lest it slip away into a totally one-sided assertion of reality, remaining a relationship in name only. The healer attempts to modulate and mold the patient's self-awareness without dominating it to the point of destruction, for if that happens then the healer loses an ally in the struggle with dis-ease. Yet, as illustrated in this case study, a quite vicious procedure precludes this alliance and the patient is converted into an enemy. It is not, as Illich maintains, for example, that patients lose their autonomy. Far from it. Instead, what happens is that the modern clinical situation engenders a contradictory situation in which the patient swings like a pendulum between alienated passivity and alienated self-assertion.



Paradoxically, this follows from an ever-increasing self-consciousness on the part of health professionals to be more humane and to self-consciously allow the patient's definition of the problem a privileged place in the medical dialogue, only to co-opt that definition in a practice which becomes more rationalized as it becomes less humanized. This rationalization amounts to an attempt to wrest control from the patient and define their status for them by first compartmentalizing the person into the status of patient-hood, then into the status of thing-hood as opposed to that of a mutually interacting partner in an exchange, and then into the categories of Objective and Subjective, working through these reifications by an Analysis and a Plan. The analogy with the rationality of commodity production is complete. As with automobiles on the assembly-line, so with patients and with health itself, the difference, the pathos, and the occasional problem bearing mute testimony to the fact that unlike automobiles, patients do think and feel, and that sickness is as much an interactive human relationship as a thing-in-itself.

My intention here is not only to direct attention to the callousness that results. In addition, we have to deal with the complicated mystification present in healing in any culture, but which in our own modern clinical setting perniciously cannibalizes the potential source of strength for curing which reposes in the inter-subjectivity of patient and healer. In the name of the noble cause of healing, the professionals have been able to appropriate this mutuality and in a very real sense exploit a social relationship in such a way that its power to heal is converted into the power to control. The problems that ensue, at least as illustrated in this case study, lie in the very nature of the clinical setting and therefore are especially opaque to the therapists. As the Chaplain so forlornly noted, "She's angry of something," and this anger stems from the contradictions which assail the patient. On the one hand she sees the capacity for "mere" patients to form a therapeutic community. But on the other hand, she denies the flowering of this potential because of her being forced to allow the professionals to appropriate her discretionary powers, while at another instant she rebels against this appropriation. The circuit of reification and re-subjectification is inherently unstable. Health professionalization of this all too common type does not guarantee the smooth control that the staff demand, let alone what patients need. All of which will assuredly be met by yet further rationalization and more professionalization.

On her later admission to hospital and shortly after first talking to me about patients supporting one another, only to claim that it required a professional therapist to help her walk, the patient suddenly refused the ministrations of the Occupational Therapists. She complained that all her day was taken up with therapy, that the Occupational Therapist took an hour a day, and that she had time neither to use the bedpan, to comb her hair, nor to listen to her religious music. "When I'm sick," she declared, "I can't work eight hours a day! And yet the whole theory of my disease and getting better is rest. And so I broke down this morning and I told the Occupational Therapist I had to cut her hour out. I've got to make an hour sometime during the day when I can

just relax and not be getting in and out of a chair which hurts me severely. There's no time for anything of a personal nature...so the stress and the emotional conflict is there. And there's never any time to solve it by myself. And there was no place...because there are only eight hours. I can't put twelve hours into eight!"

Again we see that the passive alienation embodied in her relation with the professionals, which at first sight appears to be a *fait accompli*, registers an abrupt rupture, a "scene", which ripples panic amongst the staff.

The Occupational Therapists, the Physical Therapists and the Social Workers were all deeply upset by this gesture which they saw as a denial of their efficacy and of their jobs. When I asked them why they couldn't leave her alone for a week, their leader replied, "It's my Blue Cross, Blue Shield payments as much as hers!" So, they drew up a contract with the patient, nowadays a typical procedure in the hospital as it is in many U.S. schools.

#### *Contracting*

The staff and the patient both sign a written contract stating, for example, "What you *do* have choices about," "What you *do not* have choices about," "Objectives," "What *we* will do," "What *you* will do." In this patient's case the contract stated as "objective", walk 30 feet three times a day. "What *we* will do," protect two 45 min rest periods. "What *you* will do," try and walk. The underlying motive, as described by some theorists of medical contracting, is that the staff will reward the patient for complying with their desires (positive reinforcement), rather than falling into what is seen as the trap of the old style of doing things which, supposedly, was to reinforce non-compliance by paying more attention to such behavior than to compliance. It is, in short, Behaviorism consciously deployed on the lines of market contracts in order to achieve social control. It is the medication of business applied to the business of medicine. Rewards cited in the academic and professional journals dealing with this subject are lottery tickets, money, books, magazines, assistance in filling out insurance forms, information, and time with the "health care provider" [11]. It has been found that patients often choose more time with the "health provider" and help in untangling bureaucratic snarls so as to obtain insurance benefits and medical referrals.

The very concept of the "health care provider", so disarmingly straightforward, functional, and matter-of-fact, is precisely the type of ideological labelling that drives patients into so-called non-compliance. The "health care provider", in antediluvian times known as the nurse, doctor, etc., does not provide health! Health is part of the human condition, as is disease, and the incidence and manifestations of both are heavily determined by the specificities of social organization. Health care depends for its outcome on a two-way relationship between the sick and the healer. In so far as health care is provided, *both* patient and healer are providing it, and, indeed, the concern with so-called non-compliance is testimony to that, in a back-handed way. By pre-establishing the professional as the "health care provider", the inherited social legacy that constitutes medical wisdom and

power is *a priori* declared to be the legitimate monopoly of those who can convince the rest of us that this wisdom comes from society and nature in a pre-packaged commodity form which they and only they can dispense. And in choosing as rewards for non-compliant patients help in overcoming the snarls which the "health care providers" provided, is to heap absurdity on deception. But the real pathos in this is neither the absurdity nor the deception. It is that it appears, in our day and age, to be so perfectly straight-forward and reasonable. This is the mark of ideology; its naturalness. And if its nature is to be found in the realm and language of marketing, so that medical culture and healing too succumb to the idiom of business, then we must not be all that surprised. For ours is the culture of business which puts business as the goal of culture.

In the same way that freedom and a specific type of individualism came long ago to be asserted with the rise of the free market economy, so the introduction of contracting in healing today is seen by its proponents to be a bold blow for the assertion of human rights, shattering the mystification of the feudal past when patients complied with doctors' commands out of blind trust. The proponents of contracting in clinical settings also tell us that the doctrine on which it is based, Behaviorism and the "laws" of reinforcement and extinction, have led to "the treatment of maladaptive human behaviors, including psychoses, retardation, alcoholism, low work productivity, and criminality" [12].

Maladaptation is of course not a thing, but a purely normative concept travelling under the guise of scientific jargon. More often than not it serves in contexts such as these to smuggle in a particular intention or value by making it appear to be a fact like a fact of nature. The assimilation of low work productivity, criminality, and psychosis to one another as parts of the same fact, maladaptation, and now to patients who disobey doctors' "orders", serves to remind us just how colossal a distortion is involved by reifying social relations so that pointed political values smuggled under the guise of technical constructs remain immune to criticism, stamped with the authority of the hard and impenetrable scientific fact. Once again, the nature of truth is seen to lie in the truth of nature, and not in some critical way as dependent upon the social organization of facts and nature.

In the case of the patient described in this case study we might note the following. She had every good reason for not complying with the staff's orders. This reason was not appreciated by the staff. It was seen as a threat to their power and to the coffers of Blue Cross. It was not the case, as the aforementioned authorities on contracting say, that because she was non-compliant she was getting more attention from the staff. It was totally the opposite. When she was complying she was getting too much attention, and all she wanted was free time. The immediate cause of her frustration was intimately related to the bureaucratic pressure of her daily routine. The contracting strategy chosen by the staff was thus ingeniously selected to meet this by further bureaucratizing an agreement, the contract, so as to formally deformalize her time into therapy time and "free time," time which any

freedom lover would have naively thought was hers in the first place, anyway, and not something to be owned and dispensed by the staff. The idea that she was free to choose and contract, and the idea that contracting *per se* is both sign and cause of freedom, is as pernicious an illusion that the free time the staff were granting her was not rightfully hers in the first place.

The argument in favor of contracting, that it clears away the mystifications in the murky set of understandings existing between doctor and patient, that it increases the power, understanding, and autonomy of the patient, is a fraud. Moreover, it is a fraud which highlights the false consciousness as to freedom and individualism upon which our society rests. Can autonomy and freedom be really said to be increased when it is the staff which has the power to set the options and the terms of the contract? If anything, autonomy and freedom are decreased because the illusion of freedom serves to obscure its absence. Furthermore, the type of freedom at stake in the contracting amounts to a convenient justification for denying responsibility and interpersonal obligations, just as in the name of contract and free enterprise the working class at the birth of modern capitalism was told that it was as free and as equal as the capitalists with whom they had to freely contract for the sale of their labor-power. There is little difference between that situation, the capitalist labor market, and the one which concerns us wherein the clinical setting becomes a health market and one contracts as a supposedly free agent with the "health care providers" so as to grant the latter the right to appropriate the use-value power embodied in the healing process.

Far from increasing patient autonomy (as its proponents argue), the design of contracting is unabashedly manipulative.

Requests for 15-min of uninterrupted conversation with a team member, games of checkers, cards and chess, Bible reading, discussion of current events and visits from various team members are examples of rewards chosen by patients. Such examples as these imply that patients place considerable value on our interactions with them. It also indicates that because patients value our relationships with them, we are in a powerful position for influencing the choice of behavior the patient ultimately makes; e.g. compliance versus non-compliance [13].

Just as we were wont to believe that medical care differed from business, as in Talcott Parsons' analysis whereby the "collectivity orientation" of the medical profession was opposed to the business ethic of self-interest, only to become increasingly disillusioned, so now we find that even friendship is something to be bargained for and contracted by 15 min slots. After all, if health becomes a commodity to be bought and sold, is it any wonder that friendship should likewise become a commodity? And if social relations and friendship become things, like this, it is equally unsurprising that the subject becomes object to him or herself so that

... the patients find it very rewarding to improve their own baseline. This perhaps is the most meaningful reward of all. Improving one's baseline indicates to the patient that he is essentially competing against himself. He views himself as

the one controlling his own behavior. This eliminates the need for increased interaction when the behavior is unacceptable. In other words, the patient graphically knows his behavior is unacceptable and we as professionals are free to "ignore" the unacceptable behavior [14].

#### ANTHROPOLOGY: THE NATIVE'S POINT OF VIEW

If contracting represents the intrusion of one dimension of the social sciences, Behaviorism, into medical practice so as to improve and humanize medical care, then Anthropology too has something to add; namely a concern with the native's point of view. The idea here, as put forward by Kleinman *et al.* [16] in a recent article in the prestigious *Annals of Internal Medicine*, is that disease and illness represent two different realities and that illness is shaped by culture. *Disease* represents organ dysfunction which can be modified by the pathologist and measured in the laboratory, while *illness* is what that dysfunction means to the person suffering it. Cirrhosis of the liver, for instance, can be represented in "disease" terms; by the micropathologist in terms of the architectural distortion of tissue and cellular morphology, by the biochemist in terms of changes in enzyme levels, and so on. But to the person afflicted with the "disease", it means something else and this something else is the "illness" dimension; the cultural significance of the term "cirrhosis," the meanings read into the discomforts, symptoms, signs, and treatment of the "disease", and so on. This is the native's point of view and it will of necessity differ from the doctor's "disease" viewpoint. Stemming from their reading of Anthropology and from their own experience with folk medicine in Third World cultures, Kleinman *et al.* hold this difference between "disease" and "illness" to be of great importance. They advocate an addition to the training of medical personnel so that they too will become aware of this difference and act on it. This they call "clinical social science" and its focus shall be with the "cultural construction of clinical reality". Learning and applying this shall improve doctor-patient relationships and the efficacy of therapy, overcoming the communication gap between the "doctor's model of disease" and the "patient's model of illness". As with contracting, non-compliance and the management of human beings is of prime concern.

Training modern health professionals to treat both disease and illness routinely and to uncover discrepant views of clinical reality will result in measurable improvement in management and compliance, patient satisfaction, and treatment outcomes [16].

Elucidation of the patient's model of illness will aid the clinician in dealing with conflict between their respective beliefs and values. The clinician's task is to educate the patient if the latter's model interferes with appropriate care. Education by the clinician is seen as a process of "negotiating" the different cognitive and value orientations, and such negotiation "may well be the single most important step in engaging the patient's trust" (Kleinman *et al.* [17]). Like so much of the humanistic reform-mongering propounded in recent times, in which a concern with the natives'

point of view comes to the fore, there lurks the danger that the experts will avail themselves of that knowledge only to make the science of human management all the more powerful and coercive. For indeed there will be irreconcilable conflicts of interest and these will be "negotiated" by those who hold the upper hand, albeit in terms of a language and a practice which denies such manipulation and the existence of unequal control. The old language and practice which left important assumptions unsaid and relied on an implicit set of understandings conveyed in a relationship of trust is to be transformed. The relationship is now seen in terms of a "provider" and a "client", both "allies" in a situation of mutual concern. Kleinman *et al.* demonstrate this democratic universe in which far from cleaning up the old-fashioned mystifications as embodied in trust relationships, new mystifications are put in their place which are equally if not more disturbing. With their scheme the clinician

...mediates between different cognitive and value orientations. He actively negotiates with the patient as a therapeutic ally. . . . For example, if the patient accepts the use of antibiotics but believes that the burning of incense or the wearing of an amulet or a consultation with a fortune-teller is also needed, the physician must understand this belief but need not attempt to change it. If, however, the patient regards penicillin as a "hot" remedy inappropriate for a "hot" disease and is therefore unwilling to take it, one can negotiate ways to "neutralize" penicillin or one must attempt to persuade the patient of the incorrectness of his belief, a most difficult task [17].

It is a strange "alliance" in which one party avails itself of the other's private understandings in order to manipulate them all the more successfully. What possibility is there in this sort of alliance for the patient to explore the *doctor's* private model of both disease and illness, and negotiate that? Restricted by the necessity to perpetuate professionalism and the iron-clad distinction between clinician and patient, while at the same time exhorting the need and advantage of taking cultural awareness into account, these authors fail to see that it is not the "cultural construction of clinical reality" that needs dragging into the light of day, but instead it is the clinical construction of reality that is at issue.

#### THE CULTURAL CONSTRUCTION OF CLINICAL REALITY, OR THE CLINICAL CONSTRUCTION OF CULTURE?

This is where sensitive anthropological understanding truly sheds light. The doctors and the "health care providers" are no less immune to the social construction of reality than the patients they minister, and the reality of concern is as much defined by power and control as by colorful symbols of culture, incense, amulets, fortune-telling, hot-and-cold, and so forth.

What is significant is that at this stage of medicine and the crises afflicting it, such a project should emerge. What is happening is that for the first time in the modern clinical situation, an attempt is underway to make explicit what was previously implicit, but that this archaeology of the implicit cannot escape the demands for professional control. The patient's so-called model of illness differs most significantly from the clinician's not in terms of exotic symbolization



but in terms of the anxiety to locate the social and moral meaning of the disease. The clinician cannot allow this anxiety to gain either legitimacy or to include ever-widening spheres of social relationships, including that of the hospital and the clinician, for more often than not once this process of thought is given its head it may well condemn as much as accept the contemporary constitution of social relationships and society itself.

Attempts such as those advocated by Kleinman *et al.* to make explicit what was previously implicit, merely seize on the implicit with the instruments of modern social science so to all the better control it. Yet in doing so they unwittingly reveal all the more clearly the bare bones of what really goes on in an apparently technical clinical encounter by way of manipulation and mediation of contradictions in society.

The immediate impulse for this archaeology of the implicit, this dragging into consciousness what was previously left unsaid or unconscious in medical practice, comes at a time when the issue of the so-called non-compliant patient (like the illiterate schoolchild) is alarming the medical establishment, now concerned as never before with the rationalization of the health assembly-line and with rising costs. In this regard, it is a scandal and also self-defeating to appeal to Anthropology for evidence as to the power of concepts like the "patient's model" and the difference between the "how" and the "why" of "disease" and "illness". For the medical anthropology of so-called "primitive" societies also teaches us that medicine is pre-eminently an instrument of social control. It teaches us that the "why" or "illness" dimension of sickness bears precisely on what makes life meaningful and worthwhile, compelling one to examine the social and moral causes of sickness, and that those causes lie in communal and reciprocal inter-human considerations which are antithetical to the bases of modern social organization patterned on the necessities of capitalist and bureaucratic prerogatives. As Victor Turner concludes in his discussion of the Ndembu doctor in rural Zambia:

It seems that the Ndembu "doctor" sees his task less as curing an individual patient than as remedying the ills of a corporate group. The sickness of the patient is mainly a sign that "something is rotten" in the corporate body. The patient will not get better until all the tensions and aggressions in the groups interrelations have been brought to light and exposed to ritual treatment... The doctor's task is to tap the various streams of affect associated with these conflicts and with the social and interpersonal disputes in which they are manifested, and to channel them in a socially positive direction. The raw energies of conflict are thus domesticated in the service of the traditional social order [18].

And Lévi-Strauss reminds us in his essay, "The Sorcerer and His Magic", that the rites of healing readapts society to predefined problems through the medium of the patient; that this process rejuvenates and even elaborates the society's essential axioms [19]. Charged with the emotional load of suffering and of abnormality, sickness sets forth a challenge to

the complacent and everyday acceptance of conventional structures of meaning. The doctor and the patient come together in the clinic. No longer can the community watch them and share in this work. Nevertheless, whether the patient wants to accept penicillin or not, whether the rest of us are physically present in the clinic or not, the doctor and the patient are curing the threat posed to convention and to society, tranquilizing the disturbance that sickness unleashes against normal thought which is not a static system but a system waxing, consolidating and dissolving on the reefs of its contradictions. It is not the cultural construction of clinical reality that is here at issue, but the clinical construction and reconstruction of a commoditized reality that is at stake. Until that is recognized, and acted upon, humanistic medicine is a contradiction of terms [20].

# REFERENCES

1. Lukács G. Reification and the class consciousness of the proletariat. In *History and Class Consciousness*, pp. 83-222. Merlin Press, London, 1971.
2. Evans-Pritchard E. E. *Witchcraft, Oracles and Magic among the Azande*. Clarendon Press, Oxford, 1937.
3. Sartre J. P. *Being and Nothingness*. Abridged edition, pp. 279-80. Citadel Press, Secaucus, New Jersey, 1956.
4. Radin P. *Primitive Man as a Philosopher*, p. 274. Dover, New York 1957.
5. Sontag S. *Illness as Metaphor*. Farrer, Strauss & Giroux, New York, 1978.
6. Linder R. Diagnosis: description or prescription? *Percept. Mot. Skills* 20, 1081, 1965; cited in Blaxter M. Diagnosis as Category and Process: the Case of Alcoholism. *Soc. Sci. Med.* 12, 12, 1978.
7. Foucault M. *Madness and Civilization*, p. 202. Mentor Books, New York, 1967.
8. Illich I. *Medical Nemesis*. Calder & Boyars, London, 1975.
9. Horn J. *Away with All Pests*, p. 53. Monthly Review Press, New York, 1969.
10. Goodman L. and Gilman A. (Eds) *The Pharmacological Basis of Therapeutics*, 5th edn, pp. 166-67. Macmillan, New York, 1975.
11. Boehm Steckel S. and Swain M. Contracting with patients to improve compliance. *J. Am. Hosp. Ass.* 51, 82, 1977.
12. Boehm Steckel S. and Swain M., *op. cit.*, p. 81.
13. Boehm Steckel S. The use of positive reinforcement in order to increase patient compliance. *J. Am. Ass. Nephrol. nurs. Technic.* 1, 40, 1974.
14. Boehm Steckel S. *ibid.*
15. Kleinman A., Eisenberg L. and Good B. Culture, illness and care: clinical lessons from anthropologic and cross-cultural research. *Ann. intern. Med.* 88, 1978.
16. Kleinman A. *et al.*, *op. cit.* p. 256.
17. Kleinman A. *et al.*, *op. cit.* p. 257.
18. Turner V. A Ndembu doctor in practice. In *The Forest of Symbols*, p. 392. Cornell Univ. Press, Ithaca, 1967.
19. Lévi-Strauss C. The sorcerer and his magic. In *Structural Anthropology*, pp. 161-80. Anchor Books, New York, 1967.
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## THE ISSUE OF STRUCTURED COEXISTENCE OF SCIENTIFIC AND ALTERNATIVE MEDICAL SYSTEMS: A COMPARISON OF EAST AND WEST GERMAN LEGISLATION\*†

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**Abstract**—Coexistence of modern scientific medicine with traditional or other alternative health care systems is a persisting reality not only in non-Western societies but also in highly industrialized East and West Germany. In this paper, after outlining the attitude of the National Socialist administration (1933–1945) towards this issue, the drug legislation of both East and West Germany is analyzed to assess the official status of alternative therapy in these two countries. While accepting “science” and “efficacy” as the only criteria for determining the kind of drug therapy their populations should be offered, the administrations of both East and West Germany have developed different and unique solutions for reconciling this orientation with the continued demand, by the population, for alternative drug therapy, as provided by homeopathy, anthroposophical healing, and botanical healing. It was found that drug legislation in both East and West Germany not only entails economic and public health considerations but, in addition, reflects socio-political realities and the two governments’ attitudes towards a pluralism of world views in their countries.

### INTRODUCTION

In recent years, health planners concerned with health care in societies with coexisting modern and traditional therapy systems as well as a number of anthropologists have been enthusiastic about the possibilities and consequences of integrating indigenous forms of healing into modern health care delivery systems. Encouraged by WHO and especially some Chinese experiences with structured coexistence of traditional Chinese and modern Western methods of health care, they have considered strategies for reconciling Western-type medical practice, with community oriented indigenous forms of therapy. These strategies have been especially applied in various African nations, where indigenous therapy may still constitute the sole resort for up to 80% of the population [1]. Of course, some voices have cautioned against overblown expectations in this regard [2]. Some authors have challenged the necessity of seriously considering structured coexistence at all. They have argued, that, except for societies with sophisticated medical tradi-

tions such as can be found in China and India, native, alternative therapeutic practices have been rapidly disappearing during recent years [3].

The issue of structured coexistence is limited neither to non-Western societies into which Western-style medicine was introduced earlier this century as an alien cultural entity, nor to pluralistic societies such as the U.S.A. with groups of different ethnic, cultural and historical origins. Even in contemporary East and West Germany, two developed and highly industrialized countries (in which modern science and medicine predominate), health planners and legislators are forced to take persisting alternative therapy systems into account.

I wish to outline in this paper some of the difficulties any government has to face when seriously considering formal legalization of certain aspects of traditional or other alternative therapies. I shall do so by analyzing the contents of recent drug legislation in the German Democratic Republic (East Germany) and in the Federal Republic of Germany (West Germany), for while it is relatively easy to demand structured coexistence of different healing systems I know of no example in any Asian, African or Latin American country where detailed legislation has been passed.

Any formal policy aiming at formulation of a legal basis for structured coexistence of independently conceptualized therapy systems is confronted by certain issues. On the one hand it may be counted among the responsibilities of a modern-day administration to protect its citizens from deliberate or unwitting fraud by questionable healers and to establish some kind of assurance that commodities and performances delivered through the health care system respond to the expectations of the population as fully as possible, that is, prove to be therapeutically effective. These tasks are especially justified considering that collective financing of therapy—as for instance by means of national health insurance plans—increasingly replaces

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† “Structured coexistence”: A situation where, under legal or other official regulation, the parallel existence of two or more separately conceptualized therapy systems has been set up, especially with regard to their respective practitioners. In contrast, “unstructured coexistence” occurs where an administration either does not take notice of or outlaws such therapy systems and their practitioners which represent alternatives to modern Western biomedicine. See also Unschuld P. U. Western medicine and traditional healing systems. *Ethics Sci. Med.* 3, 1, 1976.

fee for service types of remuneration where individuals themselves are free to buy what they wish to consume. On the other hand we have not yet progressed to a stage where the experience of illness and health and the efficacy of treatment could be objectively observed and evaluated, free from any subjective emotions. In fact, today the biochemical and biophysical basis of scientific medicine provides the most far reaching possibilities for an objective assessment of the presence or absence of disease. Yet, this advantage is only relative as it, for example, does not explain (as we might hope) psychic or mental illnesses. Furthermore, an argument of some proponents of alternative healing systems is not without reason. They argue, from a theory of cognition point of view, that the biochemical-biophysical methods of evaluation of organic problems or therapeutic achievements cannot be applied to a conceptual framework of illness and therapy completely different from that of scientific medicine. Consequently, a discrepancy exists between justified demands for protection of the population from fraud, bodily harm and senseless expenditures on the one hand and the obvious impossibility on the other hand of objectively testing alternative therapies in so far as they are based on independent coherent and comprehensive theories and bodies of knowledge. This discrepancy implies serious difficulties for any administration concerned with the creation of a satisfactory basis for a structured coexistence policy. Such a basis must represent a fair compromise in an inevitable conflict between individual rights and economic considerations.

This paper will focus on an analysis of legal limits imposed on *Therapiefreiheit* in the two German states. *Therapiefreiheit* is understood here as the freedom of a practitioner or patient on the basis of his world view—which always entails a perspective as to the meaning and causation of illness—to select for preventive or curative purposes a mode of therapy which is in conformity with this world view.

Ethical issues arise around any definition of limits of *Therapiefreiheit*. To what extent may an administration impose a given therapeutic system on a population even though segments of this population prefer a different therapeutic system. Legislation on structured coexistence of alternative therapy systems therefore entails economic and public health considerations, sociopolitical realities, and a government's attitude towards a pluralism of world views in its country.

In this regard a comparison of recent drug legislation in East and West Germany may be of interest beyond the borders of these two countries. East and West Germany represent two political entities with different economic systems and antagonistic ideological orientations, yet they share the same historical heritage. It should be worthwhile to analyze how these realities have influenced the coexistence of modern scientific medicine with the available health care alternatives. These alternatives are, first, homeopathy and, second, anthroposophical healing as independently conceptualized therapy systems which may be contradictory to scientific medicine as taught in German medical schools. While the theoretical basis of homeopathy, developed by the German physician Samuel Hahnemann early in the 19th Century,

is sufficiently known and needs not to be outlined here, anthroposophical healing may require some explanation. It was developed by Rudolf Steiner (died 1925) as one dimension of a comprehensive world view. Rudolf Steiner was a prolific writer who in his many books, articles and lectures published his thoughts on man's nature and on subjects such as music and architecture. He considered his views on illness and healing "an extension of scientific medicine on the basis of intellectual science" [4]. That is, while he acknowledged the reality of basic scientific laws, as for instance, in chemistry and physics, he claimed that there is more to man's existence. Through meditation, he maintained, one is able to perceive a four dimensional existence of mankind. In addition to his physical body, which is the only one recognized by science, man has an "etheral" as well as an "astral" body and, finally, an "ego-structure". In this holistic system, which avoids the separation of body and mind, Steiner distinguished between forces emanating from the earth and those originating in space. These forces wax and wane with the hours of the day and with the seasons and have their impact on the changing relationship between the four dimensions of man's existence. It is mainly a disturbance of these relationships which is responsible for the onset of illness symptoms. Anthroposophic healing does not focus on static conditions but on the dynamics of constant change. An anthroposophic healer must be able to "see" all four dimensions of his patients' existence. These healers in general are medical school graduates and fully qualified M.D.s who have "extended" their understanding of health and illness as was suggested by R. Steiner. They operate some hospitals in West Germany. Based on Steiner's world view, specific drugs have been developed for anthroposophical healing which are not recognized by orthodox biomedicine. In addition, various healing techniques are utilized, the most well known of these being "eurythmics", i.e. a particular way of preventing and overcoming illness through certain rhythmic movements of the body. These movements are guided by music and they are supposed to support the (re)creation of a harmonious balance between the various dimensions of human existence, including the mind. The anthroposophical world view is shared by a significant portion of the German population. It was outlawed in Nazi Germany and has since recovered especially in West Germany where the *Anthroposophen* run their own private school system and are able to wield considerable political influence.

Aside from homeopathy and anthroposophical healing a third therapeutic alternative had to be taken into account by both East and West German legislators, and that is, traditional *Phytotherapie* (botanical healing). For more than one century now, systematic research into hundreds of traditional German drugs of plant origin has demonstrated that a considerable number of them do indeed contain pharmacologically active ingredients. Yet, at the same time a major proportion of traditional phytotherapeutic drugs has become "obsolete", from a perspective of biomedical pharmacology, for mainly three reasons. First, some chemotherapeutic drugs have replaced traditional herbal drugs because they fulfil the same purposes in a more effective or convenient way; second,

active ingredients identified in plants have been synthesized, allowing for standardization of pharmacological effects and rendering resort to the original herb unnecessary; and third, plant drugs have become outdated simply because no effective ingredients were found in some of them through pharmacological research. These developments account for the fact that "obsolete" traditional *Phytotherapie* has to be regarded as an alternative mode of therapy today because it is still demanded and utilized by a significant segment of the population [5], yet frequently the claims raised by its adherents contradict more recent scientific insights. "Obsolete" *Phytotherapie* is applied, at present, mostly on the basis of pragmatic knowledge, i.e. it is known traditionally that a decoction prepared from the herbs X and Y will cure ailment Z. However, older notions of humoral pathology, including, for instance, the need to "cleanse one's blood" each year during springtime, also account for continuing resort to this therapy system. *Phytotherapie*, both "obsolete" and pharmacologically verified, is practiced by laymen in self-treatment as well as by fully qualified M.D.s and registered medical practitioners without M.D. license (see this paper).

The attitude of the governments of East and West Germany towards a structured coexistence of these alternative therapy systems with orthodox biomedicine in general and towards drug legislation in particular has been shaped by a variety of factors, including the historical heritage. An assessment of East and West German drug legislation would remain incomplete if one would not take into account at least the period immediately preceding the founding of the German Democratic Republic and of the Federal Republic of Germany, that is the time of National Socialist rule.

#### THE NATIONAL SOCIALIST ATTITUDE TOWARDS ALTERNATIVE THERAPY, 1933-1945

Until the outbreak of World War II it was an explicit goal of the National Socialist (N.S.) leadership to create a medical system which would take man in his entire existence both as an individual and as a part of "the people's body" into account. In this context one understands "the task, laid before the physicians by the Führer, to create a healthy population. It should not be the goal of medical personnel to treat diseases but to guide the people. The liberal confusion in the physicians' thinking has to be brought to an end once and for all!" [6]. Medical students were required to participate in workshops on the New German Medical Science [7].

At first the explicit intention of the N.S. administration to eliminate the opposition between so-called "school-medicine" and "methods of natural healing" was interpreted as favorable by exponents of the latter. Up to 1939 there were annual national conventions of such different groupings as the "German Physicians for Natural Healing", "German People's Therapy Movement", "People's Health Care Movement", and others who would discuss topics like "Natural Healing and Psychotherapy in the Framework of a New German Medical Science" [8], or "Blood and Soil as the Basis of Preventive Health Care" [9]. These conventions could be sure of atten-

tion from the highest places. When in August 1937 the International Homeopathic Congress convened in Berlin for the first time on German territory, the *Reichsärzteführer* ("National Leader of Physicians"), the *Reichsapothekerführer* ("National Leader of Pharmacists"), and the top medical administrators of the city of Berlin appeared together with Rudolf Hess, deputy Führer, second in command to Hitler, and national minister. In his opening speech Hess explained that he had assumed patronage of this meeting in order "to demonstrate visibly the interest of the National Socialist state in the movement of homeopathy" [10].

Looking at these and many other statements of the N.S. leadership in retrospect, it appears that from the beginnings of N.S. rule there was a firm commitment to a policy of integration of meaningful and useful aspects of "natural healing" into so-called school medicine; the continued existence of mutually independent alternative systems seems never to have been considered as a policy option. When in 1935 in the Rudolf-Hess-Hospital of Dresden a separate clinic was opened for natural healing and when the following year "united clinics" were established to facilitate cooperation of personnel from "school medicine" with practitioners of "natural healing", it was explicitly stated that all treatments and research were to be pursued "under control of school medicine" [11]. In a similar vein, extensive efforts were undertaken from 1936 through 1939 by the National Health Bureau to determine the therapeutic value of homeopathy [12]. In a speech delivered in 1939 to the first national convention of healers without M.D. licenses (*Heilpraktiker*), the "National Health Leader" (*Reichsgesundheitsführer*) Conti M.D., emphasized that "the integration of school methods with knowledge gained from experience has to be carried forward . . . Yet, all those therapeutic methods which prove to be, more or less veiled, defrauding the people's health should not expect to meet with approval" [13].

If one discards National Socialist rhetoric, the goal pursued here consisted of a science-oriented medicine freed from its purely chemotherapeutical and surgical bias through supplementation with aspects of "natural healing methods" that were proven to be effective.

Commensurate with the creation of one single therapy system were attempts by N.S. policy makers to establish one single body of healers, and these were university trained physicians [14]. Until 1939 the "right to be a curer" (*Kurierfreiheit*), a left-over from the extremely liberal period of the late 1860's, had been granted to basically every individual in Germany. Anyone was permitted to set up practice and act as a healer, with only the handling of specific strong medications and techniques restricted to graduates from medical schools. In 1939 an estimated 5000 persons without a medical degree offered therapeutic assistance mainly on the basis of so-called natural methods of traditional *Phytotherapie* and homeopathy. In its efforts to unite school medicine with alternative representatives, the N.S. administration on February 17, 1939, passed the so-called *Heilpraktikergesetz* ("Health Practitioner' Law") to regulate "occupational practice of medicine without license". The law recognized the existence of contem-



porary *Heilpraktiker* (health practitioners) and granted them under specified conditions, the right to continue their practice. The law also stated, however, that such personnel were not to be trained and permitted to practice in the future.

Finally we should take a look at drug legislation during the time of N.S. rule. Except for a very limited sector, including sera, vaccines and narcotics, the production of drugs outside of pharmacies was not covered by any specific laws. Only general trade legislation or police regulations, for instance, the maintenance of public order, could be applied here. This meant that almost anybody, as long as he had no police record, was permitted to start production of the trade with pharmaceutical specialties. There were neither government regulations on effectiveness of pharmaceutical products nor were there any specifications of therapeutic principles underlying such products. One might explain the lack of such regulations by the short time between the assumption of power of the National Socialists in 1933 and the outbreak of the war only 6 years later. Yet a more important reason might be the well-documented resistance of the German pharmaceutical industry against any such restrictions [15]. Thus, with minor modifications, the "Imperial Drug Order" of 1901 remained in effect through the end of N.S. rule to become a common legacy for both East and West Germany. This Imperial Order defined drugs as "resources to eliminate or alleviate disease in man or animal" and restricted the trade of such drugs to pharmacies which were subject to close governmental supervision. In order to remain free from this supervision, and also in order to be allowed to market their products in any suitable retail store, pharmaceutical producers would, where possible, avoid using the legal term "drug" as defined in the Imperial Order and would use classifications such as "symptom relievers". Not until 1941 was a police order passed using a modified concept of drugs. It defined them as "resources intended to prevent, alleviate or eliminate diseases, suffering or physical damage in man and animal" [16]. This police order, however, applied only to drug advertisement and brought no change to the general freedom of the pharmaceutical industry to market, whatever they thought the public might buy.

#### DRUG LEGISLATION AND THERAPIEFREIHEIT IN THE TWO GERMAN STATES

##### *German Democratic Republic*

The German Democratic Republic was founded October 7, 1949 on the territory of the Soviet Occupied Sector of Germany. Legislation between the end of World War II and that date was shared by the new administration of the legally still extant provinces of the former German Reich and a Central Administration of the Soviet Sector. Soon after the war, the provincial administrations had enacted drug legislation stating that in the future pharmaceutical specialties were permitted for commerce only if a need for them could be demonstrated and after they had been recorded in a drug register. The definition of "drug" was adopted, with only a minor modification in wording, from the police order of 1941: "Drugs are substances and preparations intended to prevent, alle-

viate or eliminate diseases, suffering, and physical damage in man and animal". In addition to pharmaceutical products defined as such drugs, there was a category of so-called "sanitary articles" including health food and diabetic food. These were regulated by a Department of Food Hygiene in the Ministry of Labor and Health (later by the Ministry of Health).

To ensure a standardized regulation of quality of all products related to health care, an executive order was passed in 1959 in conformity with the "Order Concerning Regulation and Supervision of Commerce with Drugs" enacted by the Central Administration of the Soviet Sector, October 5, 1949. This executive order "concerned the regulation of the complex of 'health care products' (*Gesundheitspflegemittel*) situated between drug and food legislation" [17]. By introducing the new term 'health care products' into drug legislation, the executive order aimed at redefining those products which are used as drugs although not directed against any specific disease or affliction. Thus all "sanitary articles" were now grouped together with some products formerly defined as drugs. The definition of the new group of "health care products" was worked as follows:

"Health care products as under this executive order are the following substances and preparations as far as they are not—because of their intended use or composition—drugs as defined in the regulations on commerce with drugs, or food or consumer goods as defined in food legislation: (a) plant saps; (b) preparations on the basis of natural drugs; (c) combinations of natural drugs; (d) wines with pharmaceutical products added; (e) preparations with ethereal oils as their main active ingredient; (f) body care products with pharmaceutical additions; (g) insect protection products; (h) sweets with pharmaceutical additions; (i) tonics; (k) natural and artificial mineral waters and salts intended for medical use." [18].

This definition, which in fact was little more than an enumeration, was made more precise when it was reworded to describe a category in 1964, as follows:

"Health care products as under this executive rule are substances or preparations intended to maintain the natural state and the functions of the human or animal body, as far as they are not predominately employed as food, for feeding or as consumer goods under food legislation, and as far as they are—in specific cases—not intended to be kept in stock or handed out as drugs. In particular, health care products are (a) plant saps; preparations on the basis of natural drugs and combinations of natural drugs; (b) wines and pharmacologically effective ingredients; (c) sweets with pharmacologically effective ingredients; (d) natural and artificial mineral waters or their salts intended for medical use; (e) products to prevent deficiencies; (f) preparations with ethereal oils as their main effective component; (g) body care and skin protection products, medicinal soaps and products used to aid in massage; (i) curative soil, bathing peats or other peloids; (k) substances or preparations to care for, clean or mark animals." [19]

In their official commentary, Richter, head of the "Institute of Drug Affairs of the German Democratic Republic", and Keune added to this definition by characterizing "health care products" as "having in common that with respect to their composition, form and declaration they are expected traditionally by certain consumer circles to exert certain medical, sanitary or preventive effects and they are used in accor-

dance with these expectations" [20]. Before we investigate some of the consequences of the introduction of a group of "health care products", especially in comparison with the complex of drugs, we should quote the definition of "drug" in the first "Drug Law" of the German Democratic Republic from 1964. Extending the old concept of drug considerably, Section 2 stated:

"Drugs are substances or preparations intended, through application on or within the human or animal body, to (a) prevent, alleviate or eliminate diseases, suffering or physical harm; (b) maintain or influence the efficiency of the body or its organs; (c) replace substances or body liquids produced by the human or animal body; (d) introduce general or local anesthesia; (e) diagnose the constitution, condition or functions of the body, (f) facilitate birth or influence delivery; (g) prevent pregnancy; (h) terminate addictions or withdraw from tobacco and alcohol abuse; (i) induce weight loss, eliminate emaciation or alter physical appearance in some other way; (k) eliminate or render harmless pathological agents, parasites or other substances causing physical damage".

This definition, through incorporating the phrase "intended to", leaves open whether a given substance or preparation employed as "drug" is actually required to fulfil any of the purposes listed under (a) through (k). Despite such wording, which may appear vague at first glance, but is legally necessary in order to, for instance, cover placebo treatment, the East German legislation has left no doubt as to what kind of drugs it wants to see offered to the population. Thus, in section 1, entitled "Principles" and preceding the definition just quoted, it is stated: "the care for the health of the population and veterinary medical provisions for animal stocks require that... the principles of a science based... mode of prescription of drugs are realized". Statements to the same effect are found in other sections as well as in the official commentary. For instance, some people in Germany utilize potato herbs for a treatment of warts. The official commentary to the Drug Law uses this example to illustrate the prohibition for any pharmacist to sell even such seemingly innocuous items to a customer who wants to use them as "drugs". The harm to be expected here may result from self-medication and avoidance of expert treatment.

Richter and Keune, in their official commentary, further elaborated on the science orientation of East German drug legislation when they defined its main principle as follows: "In the interest of the protection of the health of the population, the available range of drugs must comply with the most recent scientific insights" [21]. And the minister of health affairs in explaining this law to the East German parliament, the *Volkskammer*, said: "With meaningful prescription and correct dosage, drugs acquire, in the hand of the physician, a positive significance both for the individual and for society. The physician as the competent expert selects for his patients the necessary drugs—and not the patient himself. In this task the pharmacist carries high responsibility also. He is the consultant to the physician regarding optimal drug therapy; he must help utilize our pharmaceutical stock as well as possible in order to accomplish a scientifically founded mode of prescription" [22].

In accordance with this tendency towards a health

care delivery system based upon scientifically trained personnel and scientifically justified therapy, the 1939 "health practitioners law" was adopted by the German Democratic Republic, barring the training of further *Heilpraktiker*. Estimates by the Institute of Drug Affairs in East Berlin suggest that only fifty or so such practitioners, all of older age, remain in practice in that country.

If one views East German drug legislation in its entirety, there appears to be more tolerance with respect to alternative therapy than one might imagine after reading only the central sections just quoted. Obviously, in order to reconcile the unequivocal political intentions of the East German administration with a continuing demand for alternative therapies by segments of the population, some kind of a compromise had to be found.

The major difference between the group of so-called "health care products" and the group of "drugs", as specified in the East German legislation, is as follows: the legal admission of a substance or preparation as a "health care product" requires only evidence of a "social need", whereas the legal admission of "drugs" is tied to proof of "social and medical need". A "social need" is understood as "an interest by society as a whole to supplement the range of available products". This interest may be shaped by industrial capacities as well as by knowledge of the beneficial and harmful effects of a product. The mere precondition of "social need" for an admission of "health care products" allows for their introduction into the health care system solely at the request of the population even though no pharmacological effect can be attributed to them from a scientific perspective. As one example, popular demand for a preparation based on the East Asian root of *Panax ginseng*—obviously created by West German television commercials reaching far into East German territory—was mentioned to this author. As a result, production of a similar preparation and its admission as a "health care product" on the grounds of "social need" were authorized by the East German Administration although no objective "medical need" existed.

Even so-called "drugs" include preparations which, from a scientific point of view, do not possess any pharmacological effect. This is because the definition of "medical need" encompasses the need of physicians to occasionally use placebo treatment. One example is "bovine heart extract", a preparation marketed in Germany before 1945. Other drugs that are considered placebos include preparations manufactured from traditional German medicinal plants. However, the number of such preparations has been steadily decreased over the years.

The basic tinctures and dilutions of homeopathy are also admitted as "drugs" although there is no teaching of homeopathy in contemporary East German schools of medicine and pharmacy. The basis of the East German administration's attitude towards homeopathy was established 1958 when the medical faculty of the prestigious Humboldt University of East Berlin issued the following statement: "On the grounds of scientific understanding, homeopathy is neither clinically nor prophylactically applicable in the treatment of severe illness, in particular of the organs" [23]. This implies that homeopathic treat-

ment may have some—possibly psychological—effect if used against minor illnesses. However, the number of homeopathic remedies legally admitted in East Germany has been significantly decreased in recent years. Taking different package sizes into account, there were 1211 items available to the public in 1967 as compared to only 250 in 1969 [24]. The 1977 issue of the *Register of Drugs*, published by the Institute of Drug Affairs of the German Democratic Republic lists 136 "registered homeopathic pharmaceutical specialties" [25]. These are basic tinctures and dilutions which can, in the pharmacies, be further diluted to meet a specific treatment's requirement. All remedies classified as "drugs" can be sold only in pharmacies and are approved for National Health Insurance payments if prescribed by a physician.

Further evidence that the continued interest of some segments of the population in alternative modes of therapy is acknowledged by the East German administration may be seen in the ongoing existence of a small number of factories. These factories, as for instance the firm of Anthropan in Geraberg, are allowed to continue production despite their nationalization several years ago.

This, then, is the structural framework within which current East German drug legislation permits *Therapiefreiheit* and the coexistence of scientific medicine and currently acknowledged alternative therapy systems in the German Democratic Republic. It is based on a policy which envisages the gradual phasing out of practices and beliefs irreconcilable with scientific insights. Such a policy reflects the notion that there is only one truth in man's perception of his existence, that this truth is gradually approachable by means of the methods of empirical science, and that those who know of this truth must persuade the entire population to accept it as a basic world view. In addition, East German drug policy should also be seen as it relates to the economic system of state owned industries and to certain post-war economic constraints of that country. When the German Democratic Republic was founded, almost all major industrial compounds stood on West German territory. The capacities of chemical and pharmaceutical industry situated in East Germany were insignificant. During the following years, the development of an East German chemical industry received highest priority while it remained the prime task of the emerging pharmaceutical industry to reproduce only the most essential substances and preparations which had been discovered as useful and effective remedies in other countries. Because of this planning strategy, a significant amount of resources which would have been necessary for creative pharmaceutical research was saved and was allotted to the construction of more urgently needed sectors of the industry.

#### FEDERAL REPUBLIC OF GERMANY

Early post-war legislation by at least one of the West German states forming the Federal Republic (founded May 23, 1949), namely Bavaria, also adopted the 1941 police orders' definition of "drug". In 1961, however, when the first federal "Law concerning Drug Commerce" was passed, the definition

of "drug", in section 1, article 1, represented an innovation:

"Drugs as under this law are substances or preparations from substances which are intended by the producer, or who else introduces them into commerce, through application on or within the human or animal body to (a) recognize or influence the nature, condition or functions of the body or mental conditions; (b) replace effective substances or body liquids produced by the human or animal body; (c) eliminate or render harmless pathological agents, parasites or other substances alien to the body".

A striking characteristic of this definition in comparison with older definitions and with the one formulated three years later in the first East German "Drug Law", may be seen in the avoidance of such concepts as "disease, suffering, physical damage" and "to cure, to alleviate and to prevent". The wording was purposely all-embracing and ordinary food, which obviously has some of the effects attributed here to drugs, was excluded from the definition in article 3 of the same section. With this legislative "trick" the emergence of any grey zone of remedies covered neither by drug nor by food legislation was to be prevented.

As to *Therapiefreiheit*, the law of 1961 did not entail any significant change. It did not ask for any evidence of efficacy of drugs marketed henceforth and the government, in its official report to the parliament, refused to comply with requests from the opposition to the effect that a "need" should be prerequisite to the legal admission of any drug:

"From experience, judgments regarding the efficacy of a drug and—related to this—regarding the question of whether a need for it exists can be passed only after careful clinical testing and after long periods of utilization by physicians. To conduct such evaluations would lead to a significant delay in the registration [of drugs] and seems indefensible with respect to the producers. On the other hand, the issue of a government opinion concerning the efficacy of a drug comes close to an equally indefensible official recommendation of a certain therapeutic utilization of this drug." [26]

As a result, the 1961 "drug law" of West Germany required merely the registration of all pharmaceutical specialties at the Federal Health Bureau (*Bundesgesundheitsamt*) for possible surveillance purposes. Prior to 1961 the pharmaceutical industry had enjoyed nearly total freedom outside of specific legislation, the situation created now might be characterized as one of near total freedom within specific legislation. This freedom was limited only in that given precisely defined conditions had to be fulfilled by a manufacturer in order to receive a license to produce drugs. Furthermore, in Section 6, the law stated that it is illegal to market harmful drugs.

The 1961 law drew sharp criticism especially from pharmacologists and other representatives of scientific medicine who branded it as serving only the interests of an irresponsible pharmaceutical industry which confused physicians with thousands of similar prescription drugs under different names and in different combinations. Similarly it confused the public by advertising a large or even higher number of ineffective products [27].

Despite some legislative modifications of the 1961 law in subsequent years, it was not before August 24,



1976, when the "Law to Restructure Drug Legislation" was passed by the Federal Parliament, the *Bundestag*, that a fundamental reorientation finally materialized. The policy of the government was shaped now, on the one hand, by a necessity to introduce into federal legislation—in compliance with the guidelines set by the European Community—the request for proof of efficacy as a precondition for the legal admission of any drug. On the other hand, the legislature was forced, in the formulation of its drug legislation, to take into account the pluralism of world views in the Federal Republic to such a degree that the existing alternative modes of therapy were not subjected to any unfair restrictions. In the following, I wish to outline how far these conflicting goals were realized.

The West German drug law of 1976, in section 2, article 1, contains the following "definition of concepts" which, continuing the pre-1961 tradition, comes close to the respective formulation in the East German law of 1964:

"Drugs are substances and preparations from substances intended, through application on or within the human or animal body, to (a) cure, alleviate, prevent or diagnose disease, suffering, physical damage or sickness complaints; (b) recognize the nature, condition or the functions of the body as well as mental conditions; (c) replace effective substances or organic liquids produced by the human or animal body; (d) ward off, eliminate or render harmless pathological agents, parasites or other substances alien to the body; (e) influence the nature, condition or the functions of the body as well as mental conditions."

Within this definition the 1976 drug law of the Federal Republic of Germany, which came into force January 1, 1978, distinguishes between "admitted" and "registered" drugs. Among other details (see below), an application for "admission" (*Zulassung*) of a drug must contain specific data based on pharmacological-toxicological and clinical tests concerning the safety, the efficacy as declared by the producer, and the indications for use of the product. These data, however, are not required for the mere "registration" (*Registrierung*) of a drug. The possibility of registration is limited to such homeopathic remedies for which a direct effect cannot be demonstrated by means of currently available scientific methods.

The registrations of such homeopathic preparations depend mainly on whether certain standardized pharmaceutical manufacturing procedures were followed. These procedures, officially specified, had to be published in an official "Homeopathic Pharmacopoeia"; a compendium which has become an official part of the "(West) German Pharmacopoeia" [28].

In return for the willingness of the legislature to allow such homeopathic drugs to be marketed on the basis of registration only, the law states (section 10, article 4; section 11, article 3) that it is illegal to add to such products any information regarding the indications envisaged by the manufacturer. This entails that in the future, to a large degree, only homeopathic expert healers will be able to select and prescribe—on the basis of a diagnosis of the needs of individual patients and in accordance with their individual conditions—the most appropriate homeopathic treatment. As a consequence, advertisement for "registered" homeopathic drugs is greatly reduced.

This regulation imposes no new restrictions on

homeopathy. The more important producers of homeopathic remedies have traditionally refrained from providing information regarding the indications of their purely homeopathic products because true homeopathy does not have a concept of disease as does biomedicine. The integration of a homeopathic pharmacopoeia into the official (West) German *Pharmacopoeia*, might even be seen as an upgrading of this therapeutic system. To its adherents it should make no difference whether their drugs are "registered" or "admitted" as long as they are available. If prescribed by physicians cooperating with health insurance plans, treatment with homeopathic drugs, regardless of whether they are "admitted" or "registered", is funded publicly. Some health insurance plans, especially those organized by industrial firms, even refund homeopathic expenditures if a treatment was prescribed by a *Heilpraktiker*.

"Admission"—as specified by the 1976 West German drug law—is required for all non-homeopathic pharmaceutical specialities, with some exceptions outlined in section 21. In addition, "admission" is open to homeopathic drugs for which scientific evidence of efficacy is obtainable. Aside from certain purely descriptive details, a manufacturer is required to file with his application for "admission" the following documentation concerning the product in question:

1. The results of physical, chemical, biological or microbiological experiments and the methods employed leading to these results (i.e. analytical testing);
2. The results of pharmacological and toxicological experiments (i.e. pharmacological-toxicological testing);
3. The results of clinical or other medical, dental or veterinary trials (i.e. clinical testing)" (section 20, article 2, nos 1-3)."

These data have to be supplemented by "expert opinions" as to the quality, toxicity and pharmacological properties as well as to the efficacy of the drug with regard to the indications named by the producer.

The West German Federal Health Bureau (*Bundesgesundheitsamt*), once it has received all this documentation, may submit it to its own experts for evaluation but it *must* submit it to an "admissions committee" before it makes a final decision. As is stated in section 25, article 6, "to serve on an admissions committee, experts will be appointed who command scientific knowledge and practical experience regarding the respective areas of indication, the respective groups of substances and the respective modes of therapy". As provided by current West German drug legislation, this wording is pivotal in the issue of structured co-existence. In an explanatory comment, the Parliamentary Committee on Youth, Family and Health remarked:

"The weight of external expertise, combining theoretical knowledge and practical experiences and being concentrated in committees, will lead to *de facto* restricting the admissions administration to recommendations issued by the experts on the basis of their special expertise. The (Youth, Family and Health) committee assumes that the drug admissions administration will, as a rule, adopt the results worked out by the (external expert) committees. The (drug admissions administration) will be able to deviate from these results only in specially substantiated cases concerning the safety of a drug" [29]. The original draft



of the 1976 law did not call for such external expert committees. Instead it was planned that the Federal Health Bureau in cooperation with experts would internally work out criteria concerning the admission of drugs. The degree of influence these experts were supposed to exert in the decision making process of the Federal Health Bureau was not specifically defined in the original draft. The adherents of non-biomedical therapy systems viewed this proposition as a severe threat to their freedom because they expected a biomedical bias on the side of administrators and scientists affiliated with the Federal Health Bureau and its Drug Administration. With intense political lobbying, they were able to force the government to introduce the institution of "external expert committees" as an acceptable compromise [30].

How this new legislation works in practice can be illustrated thusly. Assuming the manufacturer of a new, chemotherapeutic cardiac drug applies for "admission" of this product. He will have to send the required documentation to the Federal Health Bureau which may consult its own expert advisors and then will submit the data to an external expert committee on chemotherapeutic cardiac therapy. This committee will issue a recommendation which will be followed by the Federal Health Bureau as long as the latter suspects no harm will result from treatment with the particular drug.

The same path to "admission" is necessary, e.g., for the manufacturer of a drug based on the principles of anthroposophical healing. The difference is that the Federal Health Bureau will have to submit the data to an external expert committee consisting entirely of representatives from the anthroposophical therapy system. This committee, as all the others on homeopathy, *Phytotherapie* and various chemotherapeutic forms of treatment, must publish its criteria on which it bases its recommendations for "admission". With this requirement the legislature intends to facilitate public and scientific discussion. Whether such a discussion will be possible at all, though, is not clear at this time. The premises upon which R. Steiner founded his "extension of medical science based on intellectual science" are alien to "pure" scientists and it is questionable whether fruitful discussions will develop between the latter and adherents of anthroposophical healing. For example, it would be difficult for a molecular biologist to deal with the problem of "a balanced activity of the physical, astral and etheral bodies as well as of the ego-structure".

Because the responsible Federal Parliamentary Committee had, in its report, stated that "the drug admissions administration will, as a rule, adopt the results worked out by the (external expert) committees", there exists, *de facto*, no restriction on the anthroposophists introducing their specific pharmaceutical specialities into commerce, as long as they prove to be harmless. The *Therapieneutralität* of the West German government, that is, in abstaining from any decision on the mode of therapy it would prefer, has thus been carried to the extreme. From the producer to anthroposophically-oriented physicians who perform the clinical trials to the "external expert committee" the decision concerning the efficacy of a drug, as demanded by the legislature, remains completely in the hands of the adherents of the specific therapy sys-

tems. In this regard it is of great significance that the responsible Federal Parliamentary Committee on Youth, Family and Health had spoken of "differing scientific doctrines"; in its final report we read (italics mine): "The committee, in formulating the requirements for proof of efficacy, has been guided by the political goal that the existing pluralism of sciences in drug therapy must be clearly reflected in the way admissions are granted" [31].

In accordance with this statement is the important wording in section 25, article 6, of the 1976 law, as quoted already: "to serve on the (external) committee, experts will be appointed who command a scientific knowledge... regarding the respective modes of therapy" (see this page).

If the legislature, for instance, had spoken of "theoretical" or "conceptual" pluralism or knowledge it would have maintained its *Therapieneutralität* and the attribute "scientific" would have continued to be applied only to biomedicine and its mode of treatment. However, in applying the concept "scientific" not only to the doctrine and methods of so-called school medicine but also to homeopathy and anthroposophical healing, the legislature has, deliberately or not, brought about at least a terminological upgrading of the doctrines of Hahnemann and Steiner which appears to be unique and should receive attention from historians of science.

In this context, further regulations, as laid down in section 22, article 3, have to be quoted, where the following is stated:

"Instead of the results as requested by (section 22) article 2, numbers 2 and 3 (these are the results of the pharmacological-toxicological and of the clinical testing, see this page), other scientific documentation may be offered (in an application for "admission")

1. of a drug the effects and side-effects of which are already known and are demonstrated by this documentation,
2. ....
3. of a drug which represents a new combination of known ingredients, as far as these ingredients are concerned. In addition such other scientific documentation may also be offered concerning the combination itself if the efficacy and the harmlessness of the drug, as regards its composition, its dosage, its form of preparation and its indications, can be determined on the basis of this documentation."

With this regulation, quoted here only in excerpts, the legislature has created the possibility to integrate well-known remedies, the use of which is based on long experience, into the group of "admitted" drugs without demanding the lengthy and costly process of scientifically proving their efficacy and harmlessness. The rationale behind this liberal regulation, which still requires analytical testing (section 22, article 2, number 1, see this page), was to prevent existing research capacities in laboratories and clinics from being swamped by a flood of retesting of older preparations and to reserve these capacities as much as possible for research on new developments.

This regulation was formulated in conformity with the respective guidelines set by the European Community on January 25, 1965. However, it should be pointed out that the use of the term "scientific documentation" in section 22, article 2, numbers 2 and 3 (and also in section 24, article 2, not quoted here) goes beyond the respective wording in these guidelines

where the term "bibliographical documentation" was chosen [32].

In sum, the 1976 drug law of the Federal Republic of Germany appears to guarantee that pharmaceutical specialties of the chemotherapeutic, biomedical mode of therapy can be brought into commerce only after strict evidence concerning their safety and their efficacy has been produced. This is in accordance with international developments. In addition, the federal government has granted specified alternative therapy systems, in an acceptable framework, the possibility of marketing their specific drugs. The fact that the legislation, in its legal wording, has attributed to the doctrines of Hahnemann and Steiner a "scientific" nature, may be regarded as an extraordinary move.

Finally, in order to return to the comparison of *Therapiefreiheit* in East and West Germany, I should add that section 4 of the health practitioners law of 1939, outlawing the training of further *Heilpraktiker*, was ruled unconstitutional in the Federal Republic of Germany. Since the 1950's various schools have been founded to train such personnel and prepare them for a licensure examination. As a result, *Heilpraktiker* are a ubiquitous phenomenon in West German towns and cities; it is noteworthy that their practice includes various traditional German modes of therapy as well as more recent "acquisitions" such as acupuncture and yoga.

#### CONCLUSIONS

The limits on *Therapiefreiheit* have been drawn quite differently in East and West Germany in accordance with their different social and economic orders and also as a result of differing perceptions as to the role of government. The quantity of pharmaceutical products available and their variation in terms of alternative therapy systems have been influenced in East Germany by an unequivocal preference of the legislature, in a centrally planned economy, for scientific biomedicine, and in West Germany, in contrast, by the government's avoidance, in a liberal market economy, of a decision on a preferred therapy system. Today, in the German Democratic Republic, about 2000 officially registered drugs (including variations in doses and mode of application, but not in package size), based on approximately 600-700 chemical substances, are offered by an industry which is not only state-owned but, in addition, is subjected to political and expert guidance by the Institute of Drug Affairs in East Berlin. In comparison, in the Federal Republic of Germany, tens of thousands of drugs are marketed by a powerful pharmaceutical industry the influence of which on policy making in general and drug legislation in specific has not been studied sufficiently as yet.

Both East and West Germany have, in their own ways and within the framework of their respective economic and sociopolitical realities, approached the issue of structured coexistence. Both countries have striven to accept "science" and "efficacy" as the only criteria for determining the kind of drug therapy their populations should be offered. The persisting reality of alternative therapy systems has led to different and unique solutions.

In East Germany, a group of "health care pro-

ducts" (*Gesundheitspflegemittel*) was created in 1959 to allow for the continued and supervised consumption of traditional remedies without calling them drugs. Secondly, because of the inclusion of a need for placebo treatment into the definition of "medical need", preparations without scientifically proveable efficacy were permitted to be included as "drugs". Their numbers, however, have steadily decreased over the past few years.

In West Germany, the solution resulted in an unforeseen terminological upgrading of doctrines competing with biomedicine. From the contents of current West German drug legislation, it appears that there will be no significant reduction in pharmaceutical products marketed within the conceptual framework of any of the competing therapy systems outlined at the beginning of this paper. In addition, West German legislation even allows for the establishment of further alternative therapy systems.

#### REFERENCES

1. Janzen J. M. *The Quest for Therapy in Lower Zaire*, pp. 223. Berkeley, 1978. Dunlop D. W. Alternatives to "modern" health delivery systems in Africa: public policy issues of traditional health systems. *Soc. Sci. Med.* 9, 581, 1975. WHO Health manpower development: training and utilization of traditional healers and their collaboration with health care delivery systems. *Provisional Agenda* item 17, EB 57/21. Geneva, 21 Nov. 1975. WHO Regional expert committee on traditional medicine in the African region. *Draft Final Report*. Brazzaville, 1976.
2. Weisz J. R. East African medical attitudes. *Soc. Sci. Med.* 6, 323, 1972.
3. Foster G. M. Medical anthropology and international health planning. *Soc. Sci. Med.* 11, 532, 1977.
4. Steiner R. and Wegmann I. *Erweiterung der Heilkunde auf geisteswissenschaftlicher Grundlage*. Dorlach, 1977.
5. This segment of the population is large enough to support a large multimillion dollar industry. Various more or less well-known manufacturers market a large number of pharmaceutical products based on herbal materials. The preparations offered may appear as teas, drops, liquids, suppositories, injections, plasters, ointments and in other forms to be applied externally or internally.
6. *Pharm. Ztg. Berl.* 81, 99, 1936.
7. *Dt. med. Wschr.* 63, 231, 1937.
8. *Dt. med. Wschr.* 62, 1637, 1676, 1936.
9. *Dt. ApothZtg* 53, 960, 1938.
10. *Pharm. Ztg. Berl.* 82, 823, 1937.
11. *Dt. med. Wschr.* 63, 231, 1937.
12. Prokop O. and Wimmer W. *Der moderne Okkultismus*, pp. 450. Stuttgart, 1976.
13. *Dt. ApothZtg* 54, 548, 1939.
14. Cf. Erklärung des Reichsärztesführers zur Heilpraktikerfrage (Declaration by the National Leader of Physicians concerning the issue of Health Practitioners). *Pharm. Ztg. Berl.* 82, 833, 1937.
15. *Pharm. Ztg. Berl.* 77, 221, 1932.
16. *Reichsgesetzblatt*, 1, 587.
17. *Gesetzblatt*, 1, 915.
18. *Ibid.*
19. Richter J. and Keune G. *Arzneimittelrecht der DDR, Kommentar*, Vol. 1, p. 249. Berlin, 1972.
20. *Ibid.*, 250.
21. *Ibid.*, 15.
22. *Ibid.*, 24.
23. *Dt. med. Wschr.* 103, 1323, 1978.
24. Richter J. and Keune G. *Op. cit.*, 15.

25. Institut für Arzneimittelwesen der DDR (Ed.) *Arzneimittelverzeichnis 1977*, Vol. 1, p. 370. Berlin, 1977.
26. Deutscher Bundestag, 3. Wahlperiode, *Drucksache 654*, 3, 1958.
27. See, for instance, the controversy published in the weekly journal *Die Zeit* in its July and August 1962 issues; also Behrens P. Siebentausend ist zu niedrig gegriffen (Seven thousand as an estimate is too low). *Pharm. Ztg, Berl.* **107**, 1587, 1962.
28. Until 1934 a law specified that only those pharmacies holding homeopathic drugs in stock had to keep a copy of a homeopathic pharmacopoeia. There existed, despite four decades of homeopathic lobbying, no state sanctioned homeopathic pharmacopoeia at that time and pharmacists were free to select whichever they preferred from several private publications. *Dt. ApothZtg* **49**, 1335, 1934. Beginning 1934, Oct. 1, all pharmacies were obliged to possess at least one copy of a homeopathic pharmacopoeia which was specified by the government but still published by a private firm. This regulation remained in force until the 1976 drug law in the Federal Republic was passed. In East Germany, no homeopathic pharmacopoeia is recognized or recommended officially any longer. Formulas as to standard homeopathic procedures have been incorporated into the *Standardrezepturen* ("Standard formulas") which have been added as an appendix to the 1977 edition of the *Arzneimittelverzeichnis* ("Register of Drugs"), see above note [19].
29. Cf. Hammans H. Die Arzneimittelzulassung nach dem neuen Arzneimittelgesetz (The admission of drugs in accordance with the new drug law). *Pharm. Ztg, Berl.* **123**, 1563, 1978.
30. Especially in anthroposophic literature, outspoken arguments were published against, for instance, "the inhuman consequences of 'strictly scientific standards'" (Kienle G. *Arzneimittelsicherheit und Gesellschaft*, p. 156. Stuttgart, New York, 1974). In addition, the concepts of "efficacy without effects" and of "effects without efficacy" were developed. "Effect" was understood here as the effect of a substance on the organism as observed in clinical or pharmacological tests, whereas "efficacy" was used to describe the successful treatment in a real therapeutic situation. "Effects" and "efficacy" do not necessarily depend on each other, representatives of anthroposophic healing argued, and they substantiated this claim with strong evidence. (Kienle G. *Op. cit.*, 99) Further, it was maintained by anthroposophs that not only the belief of a patient but also the belief of the physician in the efficacy of a specific drug was a necessary prerequisite for its successful application.
31. Cf. Hammans H. *Op. Cit.*, 1563.
32. Official Report of the European Community 369/65, February 9, 1965; chapter 2, article 4, 8a.

## THE MANAGEMENT OF EARLY PREGNANCY: COLOMBIAN FOLK CONCEPTS OF FERTILITY CONTROL

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**Abstract**—Population researchers have long debated the extent to which women throughout time may have controlled their own fertility. The lack of sophisticated contraceptive technology until recently led to the belief that longterm fluctuations in birth rates were the result of circumstance rather than deliberate birth control practices. Case materials from Cali, Colombia are presented to show one way women influenced the frequency and timing of births without modern contraceptives. Women in Cali take advantage of the ambiguity about when a pregnancy begins to practice early pregnancy control. The Colombian folk pharmacopeia contains a large number of substances to bring on a late menstrual period and to induce an early abortion. Users often do not distinguish between the two effects. Voluntary abortion is illegal, socially disapproved, and subject to strong negative sanction. Yet the difficulty distinguishing between a late menstrual period and an early abortion allows women a degree of unsanctioned choice. They recognize an intermediate state when a potential pregnancy may be reversed, because it is too early to confirm its existence. Cali women control fertility during this early pregnancy period while avoiding guilt and social disapproval.

### INTRODUCTION

Increased attention has recently been paid to birth control practices in preindustrial societies [1-3]. These studies generally involve descriptions of methods that have been used to keep fertility below the biological maximum. One intent has been to determine the role of "folk" birth control techniques in long-term patterns of population growth. A neglected aspect of this research lies in examining the relationship between the cultural definition of when a pregnancy begins and the fertility control methods that are used. Without this perspective, birth control practices may be difficult to understand since they are removed from their cultural context.

In this report, a preliminary description of Colombian women's beliefs about when a pregnancy begins will be offered along with some hypotheses about the sociological functions of this sort of belief system. A combination of anecdotal and statistical data will be used to show how Colombian women influence the frequency and timing of births without modern contraceptives. Colombian women allow themselves to use menstrual inducing techniques early in gestation by denying that the pregnancy exists.

This material touches on a larger set of issues of interest to anthropologists and population researchers. Worldwide ethnographic literature reveals that even in societies where strong pronatalist ideologies have prevailed and extensive social and cultural supports for large families have been the rule, women have developed a variety of techniques to limit births [4-7]. These studies seldom show how women justify and practice fertility regulation in the face of a dominant ideology which requires high fertility of them. The case material presented here will show one way fertility control is practiced despite extensive negative sanctions. Women take advantage of the difficulty early in gestation of determining whether conception has occurred to end unwanted pregnancies.

The Colombian folk pharmacopeia contains a wide variety of substances that are used to both induce a late menstrual period and cause an early abortion. Since early in pregnancy it is difficult to determine which of these is the case, women can use the substances without feeling the guilt they would if they sought surgical abortion. *Caleñas* recognize an intermediate state between "not pregnant" and "pregnant" which I will call "possibly pregnant". During this time sanctions against abortion are temporarily suspended and women with unwanted pregnancies may take active steps to restore menstruation.

### THE SETTING

The data presented here were collected during 17 months of field work in Cali, Colombia's third largest city, as part of a larger study of the sociological concomitants of unwanted pregnancy and the decision to have an illegal abortion. Interviews were carried out between January and November of 1975 by the investigator or her female Colombian assistant. All but three were conducted in a Colombian government-operated health center. Supplementary material was collected through participant observation throughout the field research period.

Participants were asked to reconstruct the circumstances under which they decided the resolution of a pregnancy they said was unwanted from the time of conception. The open-ended interview guide consisted of five parts: general background (including questions on sociodemographics, family structure and household composition, a genealogy, employment and migration histories, and the extent and nature of kin interaction); attitudes and values (especially about sex roles, changing norms, and views on family size, sex, and contraception); projective stories (hypothetical incidents describing intrafamily conflicts to help articulate the range of norms for decision making in general); decision making (descriptions of the social



Table 1. The residences of a 10% random sample of the 3910 gynecology clinic users between January 1973 and August 1975 and the unwanted pregnancy study population of 108 women\*

Residence	Health center sample		Study Population	
	No.	%	No.	%
3 barrios surrounding the health center	202	75.7	69	63.9
Other lower class or working class barrios	45	16.9	23	21.3
Middle class and above	20	7.5	16	14.8
Total	267	100.1	108	100.0

\* Total for health center sample is less than 391 because of missing data.

Source: Browner C. Abortion decision making: Some findings from Colombia. *Stud. Family Plann.* 10, 96, 1979.

contexts in which actual major and day-to-day decisions are made); unwanted pregnancy and abortion decisions (questions about preabortion/unwanted pregnancy attitudes and behavior, the abortion decision, and the postabortion experience, with special attention to the role of relatives and friends).

#### The study population

The study population consisted of 108 women who had had at least one pregnancy they described as unwanted at the time of conception. Data on 123 unwanted pregnancies were collected. 87 women offered information on one pregnancy, 12 provided information on each of two pregnancies and four offered data on each of three. 42 of the pregnancies were ended by surgical abortion, 44 either aborted spontaneously or were aided by the use of folk abortifacients, and 37 ended in live birth [8].

The illegality of abortion and the negative attitude with which it is viewed throughout Colombia made it initially difficult to contact women willing to discuss their own provoked abortions. Participation in the study therefore came about in one of two ways. Women who came to the health center's gynecology clinic were routinely asked during the intake procedure about the outcome of their pregnancies. Those reporting an unwanted pregnancy that terminated in either live birth or an abortion were referred by a nurse to the investigator or her assistant. If they were willing to be interviewed, they were given an appointment to return at a later date.\* The second means of recruitment was through referrals from women who had already participated in the study. At the close of each interview they were asked if they knew anyone who had had an unwanted pregnancy. 72 of the study's participants (67%) were contacted in this way.

\* I did not keep a systematic accounting of the refusal rate for the women contacted directly through the health center although my impression was that this rate was low. It is impossible, however, to determine the frequency of refusals among potential informants recruited by former participants, since only those willing to participate came to the health center for an interview.

† As previously noted, the majority of the interviews were based on retrospective material. 70% of the pregnancies had occurred within 5 years of the interview.

Table 1 shows that nearly two-thirds of the women who made up the study population lived in one of three barrios surrounding the health center. These barrios have a total population of approx. 65,000. The neighborhoods were created as squatter settlements on state land nearly 30 years ago although legal title to the lots has since been sold to the occupants. Employed barrio residents typically work outside the industrial sector of the economy, the women as domestics or other types of service workers, the men as manual laborers.

The women in the study ranged in age from 17 to 52 at the time of the interview (mean age 31.1, SD 8.3).† Table 2 shows they were only slightly younger as a group than a 10% random sample of the 3910 women who visited the gynecology clinic of the health center between January 1973 and August 1975 (mean age 32.8, SD 10.5) (difference not statistically significant at 0.05 level). Visits were made for gynecological checkups, genitourinary disorders, and to obtain contraceptives. Table 2 also shows that there was no statistically significant difference between the two groups with regard to the number of times they had been pregnant, their number of living children, or the number of abortions they reported.

The study population was on the whole literate with substantial urban experience. 78% reported between 1 and 5 years of formal study, about the same as the national average [9]. 64% had been born in Cali or accompanied their parents' migration while they were still young. 80% had at one time worked for wages although most discontinued wage work when they began a resident conjugal union or became pregnant.

#### Contraceptive use

Despite extensive exposure to Western scientific or "cosmopolitan" medicine [10] through health center visits and ready access to local pharmacies, "folk" beliefs about pregnancy, abortion, and birth continue to be important in fertility-related behavior. Women are generally unfamiliar with cosmopolitan ideas about when conception is likely and they usually cite as the interval the 3-7 days following menstruation. Many still follow modified versions of the traditional postpartum quarantine period (*dieta*) as they restrict their intake of certain foods and limit some of their



Table 2. Selected means for a 10% random sample of the 3910 gynecology clinic users between January 1973 and August 1975 and the unwanted pregnancy study population of 108 women

Characteristic	Health center sample		Study population		T-value
	Mean	SD	Mean	SD	
Age	32.8	10.5	31.1	8.3	1.55
Number of pregnancies	5.1	10.0	4.7	2.0	0.42
Number of live births	4.4	10.5	3.6	2.2	0.73
Number of abortions	0.7	4.6	1.0	6.5	0.58

Source: Browner C. Abortion decision making: Some findings from Colombia. *Stud. Family Plann.* 10, 96, 1979.

activities during the 40 days following a birth. In the care and treatment of newborns, traditional practices are especially evident. Most mothers will try to limit the frequency with which they take their infants outside because the fresh air, especially at night, is thought to be dangerous to an infant's health. Baby's bracelets to ward off the evil eye are a common sight. And despite health center education efforts concerning appropriate nutrition and attire for newborns in subtropical climates, mothers frequently feed their infants sugar water (*agua panela*) and clothe them in hats, mittens, and booties to protect them from drafts.

Folk beliefs remain extremely important when handling an unwanted pregnancy, in part because they allow women more possibilities for fertility control than would otherwise be permitted. Although preconceptive birth control including pills, intrauterine devices, and vaginal suppositories are available through pharmacies and local health centers, access is not always simple and the technology remains far from perfect. Most of the women who made up the study population, for example, were experienced with the contraceptives commonly marketed in Cali. More than 60% (64/106) had at one time tried at least one contraceptive method, most frequently pills, the IUD, or vaginal suppositories. Their experiences with these methods, however, led many women to abandon them. At the time of the interview, just 42% of those who could become pregnant were using a contraceptive method.

The decline in contraceptive use may in fact be related to the pregnancy histories of the women in the study group, although their use did not differ statistically from the health center population ( $\chi^2 = 0.64$  difference, not statistically significant at 0.05 level). These differences are seen in Table 3. In half the unwanted pregnancies (60/120) the women said they had been using some form of contraceptive when the

pregnancy occurred. Most (88%) attributed the pregnancy to failure of the contraceptive method. Failures from pills and IUDs were held responsible for half the unwanted pregnancies attributed to method failure (27/53). The remainder most often followed the use of rhythm, suppositories, or coitus interruptus.\* When those who were not using contraceptives were asked their reasons, some said they did not trust their efficacy since that was how they had become pregnant the previous time. Others reported discomfort due to side effects caused by the method including headaches, circulatory problems, nervousness, weight gain, and skin discoloration. Still others expressed concern about health problems the method could cause, most commonly fear of cancer. This decline in use of conventional birth control meant many women were left with what they saw as few contraceptive alternatives.† Others who had no personal experience with the methods also voiced fears of harm that could result from their use citing the experiences of friends and relatives as a guide.

While many of the women in the study group found conventional birth control unsatisfactory, most did not view abortion as a contraceptive alternative despite its frequency of use throughout Colombia [13, 14]. The Catholic Church's strong opposition to abortion has a number of effects: Colombia continues to have one of the world's most restrictive abortion laws since it is prohibited under all conditions [15]. This means that obtaining an abortion can be both legally risky and physically dangerous unless one is especially wealthy and can afford the cost of a safe, illegal procedure. Women who seek abortion often do so in violation of their own religious beliefs and, if discovered, the risk of social censure is great. Over 90% of the women in the study group (99/108) were practicing Catholics and half of these (49/99) attended church at least once every 2 weeks.

Many are also afraid to willfully end a pregnancy. Illegal abortion is a popular topic for sensationalistic media attention in Cali. In-depth accounts of women who have died because of abortion complications and news of the discovery by police of clandestine abortion "rings" are regularly presented in great detail and elaborated in daily conversations. During 1974 abortion had a particularly prominent place in local papers and neighborhood gossip due to the lengthy trial of a lay midwife who was convicted and jailed following the death of a young woman on whom an abortion had been performed.

Women feared seeking an abortion because of the

\* The frequency of contraceptive failure due to use of the rhythm method ( $n = 15$ ) may, in part, be due to improper use. In data collected in Cali by the author in the summer of 1978 from 200 women with sociodemographic characteristics similar to the study population, just 8 cited midcycle as the time a woman is likely to get pregnant. Similarly, Scrimshaw [11] reports that in Guayaquil, Ecuador many of those interviewed incorrectly reported the "safe period" for intercourse as the middle of the menstrual cycle.

† This pattern of inconsistent contraceptive use among contraceptively sophisticated women is not restricted to Cali alone. See Luker [12] for a theory of contraceptive risk taking among American women.

Table 3. Contraceptive use of a 10% random sample of the 3910 gynecology clinic users between January 1973 and August 1975 and the unwanted pregnancy study population of 108 women\*

Contraceptive use†	Health center sample		Study Population	
	No.	%	No.	%
Yes	155	46.1	34	36.1
No	181	53.9	60	63.9
Total	336	100.0	94	100.0

\* Totals are less than 391 for health center sample and 108 for study population because of missing data.

† Includes only oral contraceptives or intrauterine devices.

Source: Browner C. Abortion decision making: Some findings from Colombia. *Stud. Family Plann.* 10, 96, 1979.

harm that might come to them, but they also feared the reactions of those who might discover they had had an abortion. Many Caleñas are opposed to abortion because of the health risk involved. Violation of civil or canonical law is not their primary objection. Risking one's life and subjecting one's children to possible motherlessness is considered the more serious crime. When those in the Cali study population were asked "Why do you think women are afraid to talk with doctors about a provoked abortion?" nearly half (21/46) said it was because they feared they would be punished or reprimanded (*temor de castigo*).<sup>\*</sup> When those who reported having had an induced abortion were asked their reasons for not considering another one, more than 40% (19/46) said they were afraid to undergo the procedure another time while less than 30% (13/46) spoke of remorse or said they believed they had done something wrong.

### THREE STATES OF PREGNANCY†

Interviewer: At first did you think of an abortion?

Livia: I tried, struggled to do something, to find some remedies because I didn't want to have any more children.... Certainly I didn't do anything bad, no bad things. I simply took some beverages (*bebidas*) to see if my period would come.

Since they do not find conventional contraceptives effective or acceptable nor can they easily resort to induced abortion, Colombian women must regulate fertility in other ways. One way is to utilize the ambiguity about when a pregnancy begins. Since early in a pregnancy it is difficult to confirm its existence,

\* The remainder referred to the shame they felt for their behavior (*pena*) (13/46, 28%), gave ambiguous responses (3/46, 6%), or said they simply did not know (9/46, 20%). Open-ended questions such as these were coded into response categories after the interviews had been completed.

† This material is presented as a preliminary framework. It is an attempt to describe mental states that in reality are not discrete and therefore not easily expressed in terms of a neat typology. Some areas for further investigation are outlined in the conclusion.

‡ Potts and his associates [16] report that "it is expected in a country that outlaws abortion under all circumstances that women will report induced abortions as spontaneous if they are reported at all" (p. 474).

Caleñas can deny an unwanted pregnancy by considering it a simple menstrual delay. Herbal and other remedies may then be taken to alleviate this physiological disorder.

Caleñas recognize an intermediate state between "not pregnant" and "pregnant" in the developmental course of a normal pregnancy. Women call this an *atrato* or menstrual delay. Because it may or may not be coterminous with early pregnancy, here it will be called "possibly pregnant". The existence of a possibly pregnant state provides women with an important conceptual tool. Once a pregnancy is confirmed, women generally regard it as irreversible. But during the possibly pregnant period, the uncertainty of pregnancy allows women to tamper with their menstrual cycles in an attempt to restore menstrual function. This three-state notion of pregnancy allowed Colombian women in the past to regulate fertility despite the pronatalist beliefs that were the rule. Today it is probably even more important as modern Colombian women strive to control their frequency and timing of childbearing in a poor, increasingly urban society.

The actual frequency of both menstrual irregularity and miscarriage give women concrete evidence for recognizing a possibly pregnant period. 35% of the women in the health center random sample (135/391) reported at least one abortion of either the spontaneous or induced variety.<sup>‡</sup> Folk beliefs about the gestation cycle encourage the ambiguity. For example, the length of time it takes a fetus to develop into a recognizable mass is said to vary according to the sex of the child. Males are "formed" immediately following conception, that is, they start to develop right away. The "formation" of a female fetus, however, does not occur until the fourth month of gestation. Female fetuses remain in an uncongealed tissue mass during the early months of pregnancy. There is, then, an ambiguous period when a woman may be either pregnant with a girl or experiencing menstrual delay and not actually pregnant. Early in pregnancy, women know of no sure way to make this distinction.

These beliefs may help explain some of the easy and painless early pregnancy terminations that 23% of those in the study group who had abortions reported. A woman may, for example, miss three consecutive menstrual periods and not feel very well for several mornings in succession. She may also gain some weight while she worries that she may be pregnant. When her period finally does arrive, if she finds no

Table 4. Modified Likert scale of the circumstances in which a woman may seek an induced abortion\*\*†

	No		Yes	
	No.	%	No.	%
If the woman simply does not want a child	49	62.0	30	38.0
If the woman has no husband	53	57.6	39	42.4
In cases of rape	49	53.8	42	46.2
If the family is too poor to have the child	44	46.3	51	53.7
If the pregnancy would endanger the woman's life	33	34.0	64	66.0
If the child might be born with a defect	28	31.5	61	68.5

\* Data were missing when totals do not equal 108.

† These figures may indicate greater approval of abortion than may be true of the general population since they include responses of women who underwent induced abortions or in other ways actively tried to end unwanted pregnancies.

tissue mass as part of the menstrual flow, she concludes that it was a girl she had been carrying although she may never have been pregnant to begin with.

Many instances of apparent menstrual irregularity are therefore classified as spontaneous abortions of female fetuses although the reason for this is not completely clear. It is possible that Calañas inflate the actual incidence of miscarriage to more easily disguise early provoked abortions. By sustaining the idea that miscarriage is very common, less attention is drawn to those which are willfully induced.

Miscarriage following the use of folk abortion remedies was also reported to be common. The frequency with which success is attributed to the use of early abortion remedies, however, probably exaggerates to some degree their effectiveness [17]. 23 of 44 pregnancies in the study (52%) were reported terminated following the use of one or several folk abortion methods. When pregnancies that were confirmed by a pregnancy test are compared with pregnancies not verified in this way, a different pattern emerges. While 10 of 15 unconfirmed pregnancies (67%) ended after use of folk abortifacients alone, 8 of 29 confirmed pregnancies (28%) were so terminated. The relationship between use of folk remedies and pregnancy out-

come is additionally difficult to determine since the confirmed pregnancies which ended after use of folk abortion methods may have been unstable and may have aborted in any event.

"Aborting" after experiencing early pregnancy symptoms such as menstrual delay or nausea is therefore common and may be related to the anxiety generated by the fear of an unwanted pregnancy. Women who have reached desired family size or who for other reasons do not wish to be pregnant are apt to be especially susceptible to pregnancy anxiety, as was the case of the women in the Cali study population. This fear may have made them particularly sensitive to physiological changes which might portend a pregnancy.

#### State 1: Not pregnant

Persistence of normal menstruation is a primary criterion for locating oneself in this state. Calañas carefully monitor their menstrual cycles and are quick to recognize irregularities. Although, for instance, women who visited the health center were often unsure of such matters of fact as the birth dates of their children or their home addresses, they could easily report the date of their last menstrual period, state the typical number of days of flow, and describe any deviations from the norm. Some Cali women use a calendar to monitor their cycle or simply count the number of days from one menstrual period to the next. Others rely on physical signs such as skin changes or discomfort or itching in the pubic region. One woman reported a system she had developed herself: "I wait for the water and electric bill to come. Then I know my period is due." Successful postconceptive fertility control through use of folk methods is thought possible and most effective only during early menstrual irregularity. Vigilance concerning menstrual function is therefore important.

#### State 2: Possibly pregnant

Some of the evidence suggesting the existence of an intermediate "possibly pregnant" state was seen during conversations about early pregnancy. Elysee Aurelia, for example, was concerned about her comadre's delayed menstrual period since she already had an

Table 5. When you suspected you were pregnant, what did you do to bring your period back?

Method	No.	%
Herbs	24	27.3
Injections	21	23.9
Herbs and injections	16	18.2
Herbs and commercial preparations (e.g., beer, rum, aspirin)	8	9.1
Herbs and pills	5	5.7
Herbs, pills, and commercial preparations	5	5.7
Pills	2	2.3
Commercial preparations	2	2.3
Pills and commercial preparations	2	2.3
Lift heavy objects	2	2.3
Contraceptives	1	1.1
Total	88	100.2

infant to care for and a husband who was unemployed. "Monica's period is two months late," she said. "I went and got some herbs for her to take. Of course, they're not calling it a pregnancy yet, but her period is *so* late already."

As Table 4 shows, women do not generally condone abortion and it was only under restricted circumstances such as a severe birth defect or a pregnancy that would endanger the woman's life that they said it would be appropriate to voluntarily interrupt a pregnancy. Yet only 13% said there was *no* time early in pregnancy that menstrual induction might be attempted. 45% said it would be acceptable until the end of the first month, 32% said until the end of the second month, and 10% gave time limits even greater than that.

Typical of the advice offered women with unwanted pregnancies is Aura's:

I consider [abortion] a crime after a month, and very dangerous too. It seems to me that in the third week it's a sin already. I would advise that right away you should take things, whatever things, for a month. But if that doesn't work you just have to endure it.

Women customarily practice fertility control during the early pregnancy period. A large pharmacopeia of birth controlling plants and herbs exists. Parsley, lemon, rue, white ragweed, spiderwort, and cinnamon are among those most commonly noted. These plants and herbs have long been recognized in Europe and Latin America for their emmenagogic effects. Oil extracted from the seeds of parsley is said to promote blood circulation in the pelvic region and to induce detained menstrual flow [18-20]. Both lemon and rue contain rutin which appears to have a vasoconstrictor effect on the smooth muscles of the uterus which can lead to uterine contractions [21]. Cinnamon contains safrole in the essential oils which may stimulate menstruation and uterine hemorrhaging [22]. However while abundant reports of the use of these and other remedies have been found throughout the folk botanical literature, their effectiveness remains largely unexplored by cosmopolitan scientists who may discount them because they cannot account for the causal mechanism involved in menstrual induction.

Table 5 shows that although herbal methods are the most popular, there are also many nonherbal pregnancy control remedies. The most common ones include injections of oxytocin, a pituitary hormone that stimulates uterine contractions, progesterone, a steroid used in the treatment of menstrual disorders, or estrogen, and pills that ranged in composition from contraceptive pills to quinine to some of unknown name or composition.

The choice of a remedy depends on a number of factors. Some herbs are said to be effective only during specific times in a pregnancy. "Spiderwort will work fine for you," a midwife said, "but not after the first month has passed." A second factor is the woman's physiology. Heliana reported.

They say if a person is strong the remedies won't work unless you use several of them: pills and drinks and injections. I used them all but none of them worked for me, nor for my sister either. But if your constitution is not too strong they will bring your period back.

The amount of risk a woman is willing to take is another factor that is considered, since some remedies such as quinine are known to produce an abortion but may also cause serious illness or death [16]. Finally there is the woman's own belief system and how comfortable she feels making the interventive attempts. A physician explained.

Let's take a woman who thinks she might be pregnant but she doesn't believe in abortion. She hears that two injections of a certain drug will end a pregnancy so she goes and gets just one instead. Or if an herb is recommended to her, she'll take a less strong dose than the one suggested.

Many women justify their use of herbs and injections early in pregnancy by saying they are merely tests (*pruebas*) to determine if they are actually pregnant in the interval when it is too early for a pregnancy test to be performed. *Pruebas* are said to work like hormone injections, inducing menstruation if the woman is not pregnant but not harming the woman or the developing fetus if a pregnancy exists. Many of the *pruebas* were, in fact, such injections. It may be suggested, however, that determining one's pregnancy status is not the exclusive motivation when women with unwanted pregnancies use a *prueba*. In a control group of 22 women who miscarried pregnancies they described as wanted, only one (5%) used a *prueba*. In the study group, on the other hand, in 92 of 123 unwanted pregnancies (75%), women made at least one interventive attempt, although they often described this attempt as nothing more than a test. The ability to tolerate uncertainty regarding pregnancy status may in fact have been greater among women hoping to conceive since any menstrual delay would be viewed in a positive light. For those who did not want a pregnancy, however, a delay in menstruation had distressing implications. As Eugenia Rosita explained, "When I got pregnant with my little girl we didn't really want another child. The first thing I did was ask a nurse I knew to give me an injection. I didn't want to have to keep thinking that I was pregnant." These women may have sought early "proof" of pregnancy in the hope that a minor systemic irritant may have been sufficient to terminate the pregnancy at an early stage.

Other women's experiences during early pregnancy encourage the use of folk abortifacients. Not only is their apparent success evidence that pregnancy termination is possible, but the ease with which it sometimes seems to be accomplished provides additional encouragement of their own attempts. And since the remedies are thought not to harm the fetus or otherwise affect its development if the pregnancy is stable, the interventive attempts are generally seen as safe as well. In reality, some of the ways to interrupt a pregnancy using parsley tea or lemon juice are probably harmless, although perhaps not if they are taken in very large doses. Others such as quinine do have definite side effects. But most of the time, women see little reason not to try at least one folk method if the pregnancy is not a wanted one.

### State 3: Pregnant

Caleñas experience the transition from "possibly pregnant" to "pregnant" through a combination of objective and subjective factors that may occur over a



variable period of time. Objectively, the physical signs of pregnancy become less mistakable as the pregnancy proceeds. When her friend was 5 months pregnant, for example, she asked Estella Astrid for help locating an abortionist. Estella Astrid refused. "Five months! That's a lot already; that's a fetus already. She just has to accept it." Acceptance of pregnancy may instead follow repeated failure of folk abortifacients. As Aura Anjelica explained, "I was going to have [the baby] because there just weren't any more remedies left."

Some women enter the pregnant state immediately upon missing one menstrual period or recognizing other physical changes. For others the failure of just one abortifacient provides sufficient evidence. "I drank parsley tea three mornings in a row. Nothing happened so I knew I had to accept it," Lucia said. Flora reported, "I went to a midwife and she gave me an injection. It didn't work but I was afraid to do anything more after that." The more difficulty a woman has accepting a pregnancy, the more apt she is to prolong the possibly pregnant period.

Entry into the pregnant state indicates that a woman has acknowledged the irreversibility of the pregnancy. She stops her use of folk remedies and makes another assessment of the extent to which the pregnancy is not wanted. At this point, continuation of the pregnancy has less to do with a woman's feelings about having a baby than with her evaluation of the social context into which the child will be born [8]. The decision to interrupt an actual pregnancy is a more difficult one. Surgical intervention requires a specialist such as a nurse, midwife, or doctor to perform the procedure. The experience is dangerous, frightening, expensive, illegal, and socially disapproved. When those in the study group who had had surgical abortions were asked if they would repeat the experience, only one woman (1/37 or 3%) said she might. Similarly, only 5% (2/37) reported more than one surgically provoked abortion.

#### IMPLICATIONS OF THE RESEARCH

The belief-behavior complex described above illuminates several important features of Colombian folk culture. First, it shows that fertility regulation is basic to the traditional system. Instead of the preventive birth control that advocates of cosmopolitan medicine would like Colombian women to accept, the folk methods are implemented postconception and use the suspicion of pregnancy as their point of initiation. The development of birth control technology and the design of contraceptive programs have until now been culture-bound in their orientation. As Newman writes, "A family planning program is a Western artifact. Its technology, its implementors, its ideologies are Western trained" [23]. Researchers have directed their attention almost exclusively to the pre-conceptive period and have attempted to assess the psychological or sociological reasons why women or couples often seemed reluctant to contracept. Less attention has been paid to the way pregnancy is defined or to evaluating how culturally determined views of pregnancy influence fertility control. The data in this report underscore the importance of such an approach.

Second, the beliefs presented here show that Colombian women do not passively accept unwanted pregnancies. There is ultimately a point in every pregnancy where a woman either accepts it or seeks surgical abortion. This point depends on a number of circumstances. In the case of the Cali study population, these included the age of the mother and her other dependent children, her employment status, and whether her husband or sexual partner accepted the prospect of a pregnancy. The practice of denying a pregnancy early in its course to permit intervention, however, allows Colombian women a degree of control over childbearing that is commonly said to be absent in traditional cultures.

Finally, these beliefs and practices show one of the functions of ambiguity. Throughout Latin America there is an historic emphasis on maintenance of high fertility [24]. Yet the ethnographic evidence shows that the maximization of fertility has not been an unambivalent goal, and a variety of birth control techniques have been developed. This report shows how the contradiction between the cultural injunction to maintain high fertility and women's desires to control their childbearing function is resolved. Women have created an interval after conception but before assuming the role of pregnant during which they practice fertility regulation. This allows them to undo pregnancies they do not want while escaping the sanctions, including their own guilt, associated with the concept of abortion.

#### SUGGESTIONS FOR FURTHER INVESTIGATION

This material has been offered as a preliminary description of Colombian women's concepts of pregnancy and abortion. Several areas require additional investigation. More material on the perception of pregnancy is needed. What are the physiological and psychological bases for the suspicion of pregnancy? How do women who use *pruebas* view their mode of action? Is their view of how *pruebas* work related in any way to their understanding of the modes of action of conventional contraceptives? How is the transition from possibly pregnant to pregnant signaled? What factors influence variation in the length of the possibly pregnant period? Gestation beliefs should also be explored in more detail, including the relationship between gestation beliefs and the type of fertility intervention Colombian women practice. More data are also needed on the social context in which beliefs about pregnancy and abortion are generated. How are fertility control beliefs and practices transmitted? How does a woman who suspects she might be pregnant or is suffering from menstrual delay decide who to ask about the type of remedy to try? To what extent must she hide her behavior from others? To what extent can she count on them to assist her in her fertility controlling attempts? Who are the most reliable sources of assistance? And finally, additional data are needed on the demographic effects of the three state notion of pregnancy, with special attention to analysis of the effects of the active ingredients in the plants and herbs thought to have menstrual inducing effects. Since only some of the folk abortifacients will be found effective, an evaluation of the



circumstances under which women use both effective and ineffective remedies is also required.

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#### REFERENCES

- Peterson W. T. *Population*. Macmillan, New York, 1974.
- Polgar S. Population history and population policies from an anthropological perspective. *Curr. Anthropol.* **13**, 203, 1972.
- Freedman R. Norms for family size in underdeveloped areas. In *Population, Environment, and Social Organization* (Edited by Micklin M.), p. 171. Dryden, Hinsdale, Illinois, 1973.
- Nag M. *Factors Affecting Human Fertility in Nonindustrial Societies: A Cross-Cultural Study*. Human Relations Area Files Press, New Haven, 1976.
- Ford C. S. *A Comparative Study of Human Reproduction*. Yale Univ. Press, New Haven, 1945.
- Himes N. E. *Medical History of Contraception*. Schocken, New York, 1970.
- Devereux G. *A Study of Abortion in Primitive Societies*. International Univ. Press, New York, 1976.
- Browner C. Abortion decision making: Some findings from Colombia. *Stud. Family Plann.* **10**, 96, 1979.
- Department of National Statistical Administration (DANE). *IV Censo Nacional de Población y III de Vivienda, Muestra de Avance, Agosto* (Fourth national population census and third household census. Advance sample. August). Bogotá, Colombia.
- Dunn F. L. Traditional Asian medicine and cosmopolitan medicine as adaptive systems. In *Asian Medical Systems: A Comparative Study* (Edited by Leslie C.), p. 133. Univ. California Press, Berkeley, 1976.
- Scrimshaw S. C. Anthropology and population research: application in family planning programs. International Institute for the Study of Human Reproduction, Columbia University, New York, 1972.
- Luker C. *Taking Chances: Abortion and the Decision Not to Contracept*. Univ. California Press, Berkeley, 1975.
- Correa P. G., Llanos G. and Agilera B. Estudio sobre causas de muerte en Cali (Study on the causes of death in Cali). Departamentos de Medicina Preventiva y Patología, Facultad de Medicina, Universidad del Valle, Cali, Colombia (no date).
- Mendoza-Hoyos H. Research studies on abortion and family planning in Colombia. *Milbank mem. Fund q. Bull.* **46**, 223, 1968.
- Tietze C. and Murstein M. C. Induced abortion: 1975 factbook. *Reports on Population/Family Planning* 14 (2nd edn), 1975.
- Potts M., Diggory P. and Peel J. *Abortion*. Cambridge Univ. Press, Cambridge, 1977.
- Hern W. M. Knowledge and use of herbal contraceptives in a Peruvian Amazon village. *Hum. Org.* **35**, 9, 1976.
- Grieve M. *A Modern Herbal*. Dover, New York, 1971 (1931).
- Alvarez Gonzalez P. *Yerbas Medicinales*. El Libro Español, México, 1963.
- Thompson W. A. R. (Ed). *Medicines from the Earth*. McGraw Hill, New York, 1978.
- Claus F. P., Tylor V. E. and Brady L. R. *Pharmacology*. Lea & Febiger, Philadelphia, 1970.
- Lewis W. H. and Eldin-Lewis M. *Medical Botany*. Wiley, New York, 1977.
- Newman L. Cultural factors in family planning. *Ann. N.Y. Acad. Sci.* **175**, 833, 1970.
- Back K. W. and Hass P. H. Family structure and fertility control. In *Psychological Perspectives on Population* (Edited by Fawcett J. T.), p. 77. Basic Books, New York, 1973.

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## INFANT FEEDING AND INFANT ILLNESS IN A MICRONESIAN VILLAGE

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**Abstract**—The 41 mothers of 49 infants resident in Peniyesene village, Truk, Micronesia, in 1976, were interviewed regarding their infant feeding practices and the types of illness their infants had experienced in the previous 2 years. Four-fifths of the infants received at least occasional bottlefeeding and nearly half of the infants were completely weaned from the breast before 6 months of age. Most mothers introduced semisolid foods in the first 6 months. The medical records for outpatient clinic visits and for admissions to the local hospital for these infants were also examined, and the occurrence of illness serious enough to warrant hospitalization was found to be associated with exclusive bottlefeeding in the first year of life.

Relationships between infant feeding habits and patterns of infectious disease in the first years of life have been examined in many areas of the world, in developing and industrialized nations, in temperate and tropical climates [1-7]. The role of bottlefeeding of infants in promoting the occurrence of infectious disease has been of particular concern in most of these studies and the importance of that role in various environments remains the subject of much debate [4, 7, 8]. Although the birth rate in Truk District of Micronesia is one of the highest in the world (4.5% per annum) and children two years of age or under made up 11.4% of the total district population in 1973 [10], the relationship between infant feeding and infant illness has not been investigated in this region.

In the more than 20 years since the last detailed account of infant feeding practices in Truk was prepared as part of a larger survey [11], there has been a substantial increase in affluence, educational opportunity, and availability of wage employment—all of which have been demonstrated to affect infant feeding practices in other parts of the world [12-14]. Two surveys of diet and nutritional status among various age groups in Truk were conducted in the early 1970s [15, 16], but both were concerned with dietary intake rather than with customs of feeding. None of the earlier studies dealt with the occurrence of serious childhood illness.

The present study was undertaken first, to describe current infant feeding practices in Truk and second, to determine what influence such practices have on infant morbidity. Unlike the earlier studies of diet and nutrition in Truk, which surveyed a random sample of families resident on several islands, this study reports observations on all children born during a 2-year period in a single community and provides

preliminary evidence that bottlefeeding of infants as practiced there had an adverse effect on child health.

### THE SETTING

Peniyesene village, the community in which this study was conducted, is located approximately five miles from the urban port town on Moen Island, Truk, in the Eastern Caroline Islands of Micronesia. Moen, an island of seven square miles, serves as the governmental, educational, recreational and commercial center for Truk, one of the four states that comprise the Federated States of Micronesia (formerly part of the United States Trust Territory of the Pacific Islands). Most of Peniyesene is arrayed along one side of a deep bay that cuts into the northern side of Moen Island. From the head of the bay, the rest of the village continues up the valley of the Wiichen River. Other than private homes, Peniyesene consists only of a single movie theater, a pool hall, a church building, and three small village stores.

Peniyesene is linked to the downtown area by an unpaved road, which allows its populace easy access to the wide variety of imported goods available in town and frequent exposure to the customs of visitors from industrialized countries. Peniyesene has no health care facility of its own and its inhabitants must rely on the new hospital in town for all but traditional medical care, which is still actively practiced by a number of persons in the village. Because the village is situated outside the hot, overcrowded downtown area of the island, many residents characterized it as a particularly healthy place for children.

In March, 1976, the indigenous population of Peniyesene was 468 persons. 70% of the village population was under age 30 and 17% was under age five. Census data collected by the authors revealed that a wide variety of occupations, average family incomes, and educational levels were represented in the community. Regardless of income, all Peniyesene persons

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lived in extended family households, typically consisting of three to four generations. Child care and food preparation tasks were widely shared within the households. Most households had someone involved in wage work, and a few had as many as four or five regular incomes on which to draw. Even so, Peniyesene residents continued to consume traditional foods, such as breadfruit, taro, bananas, coconuts and fish. Several families subsisted almost entirely in the traditional manner, having no one employed for regular wages and deriving their limited cash from the sale of copra and other crops. Every family consumed at least some purchased rice and canned fish. Those with higher incomes supplemented their diet with a wide range of additional foods, e.g. canned corned beef, flour, sugar, cooking oil, and soy sauce from the larger stores downtown.

The general level of sanitation in Peniyesene was poor by Western standards. Although fastidious about personal hygiene, Trukese are generally much less concerned with cleanliness in food preparation and storage. While there was some variation from household to household, cooking normally was done in a small open-sided cookhouse over a wood fire. Earth ovens and kerosene burners were also used. Domestic animals (chickens, pigs, dogs and cats) and rodents had easy access to these cooking areas, as did the omnipresent hordes of flies and other insects. Water for cooking and drinking was taken from small springs near the houses or was caught in 50-gallon drums as roof runoff during the frequent rains. No special effort was made by most Peniyesene residents to boil drinking water. A large number of corrugated tin and wood over-water latrines lined the bay and the river mouth. Laundry and bathing were done in the tiny streams or in shallow pools along the course of the river.

#### METHODS

The study population consisted of the 47 children born between January, 1974, and March, 1976, to 39 women resident in Peniyesene, both at the time of the child's birth and during the month of March, 1976. These children all had been raised in Peniyesene, with occasional short stays in other villages on Moen. In addition, two other children who had been adopted and raised by two women resident in Peniyesene from 1974 to 1976 were included in the study, even though these children were born elsewhere on Moen.

Each mother was interviewed by the authors in Trukese without aid of an interpreter. In addition to routine census information, the mothers were asked a

standard set of questions regarding the mode and schedule of feeding, the feeding of semisolids, the care of bottles and formula preparation, the persons involved in care of their infant, and the health history of each of their children under age two. Follow-up questions were asked of some of the women during informal encounters in the village. Although the interviews were conducted in March and April, 1976, the observations of feeding practices and general sanitation on which this paper is based were made over a 6-month period. Formal permission was obtained from each mother to inspect the hospital records of each child. All comments written by the attending medical officer for outpatient clinic visits and for hospital admissions were noted.

#### RESULTS

In their first year of life, only 9 of the 49 infants were breastfed exclusively, i.e. had no other source of milk (Table 1). 20 infants were given only supplementary bottles for most of their first year, usually during the day when the mother was working. For 5 of these 20 children, the supplementary feedings were initiated after their third month, and for one child, exclusive breastfeeding was resumed after a few months. The other 20 children were weaned completely from breast to bottle at some time in the first 6 months, 5 of them within the first few days of life.

Table 2 indicates the ages at which major changes in feeding of the infants occurred. About half of the 30 children already weaned from the breast at the time of the study were weaned before 6 months of age, while the other half were not weaned until near the end of the first year. Of the 14 women still breastfeeding at the time of the interview, 3 had done so for over a year and another 6 had done so for at least 8 months. 20 of the infants in the study were no longer receiving any milk, and all of these had been given milk for at least 10 months. One-third of the children still given milk were over a year old. Very few of the mothers intended to give their children any milk after the second year.

40 of the 49 children had been or would be introduced to semisolid foods in the first 6 months. Two of the three mothers who delayed the introduction of semisolids for 12 months had offered their children only breast milk for their first year of life. Commercially jarred baby food—usually pureed banana or banana and tapioca—was offered to 20 of the 49 infants in their first 6 months of life. 16 of these 20 infants were introduced to jarred semisolids between 3 and 4 months of age. The jarred foods were given to

Table 1. Source of milk fed to infants during first year of life

Mode of milk feeding	Number
Exclusively* breastfed	9
Breastfed with supplementary bottlefeeding for 12 months	20
Breastfed with supplementary bottles for 1-6 months, then bottlefed only	15
Exclusively* bottlefed	5
Total	49

\* Refers to mode of milk feeding only. Most of these infants received solid food supplements in the latter half of their first year.

Table 2. Major changes in feeding by age of infant

Age (months)	Wean from breast	Discontinue all milk	Introduce solids
1-3	6	0	18
4-6	8	0	22
7-9	0	0	4
10-12	12	12	3
13-18	3	6	0
19-24	1	2	0
Totals	30*	20†	47‡

\* Of the remaining 19 infants, 14 were not yet weaned and 5 had been exclusively bottlefed.

† The remaining 29 infants were continuing to drink milk at the time of the interview.

‡ No data on introduction of solid foods were obtained for 2 of the infants.

2 of the 9 exclusively breastfed infants, to 2 of the 5 exclusively bottlefed infants, and to 16 of the 35 breast-and-bottlefed infants—eight of whom were no longer receiving any breast milk. A few mothers also gave jarred pureed meats when the infant was older. Of the more traditional weaning foods, mashed banana was the first to be introduced and was occasionally followed by mashed papaya or mango if available. Soft boiled rice and/or mashed cooked breadfruit mixed with water followed quickly upon the fruits. Fish was introduced much later, usually by the end of the first year. A few mothers mentioned other foods which they considered acceptable for infants, such as taro (prepared as for breadfruit), soft bread, flour soup, mashed sweet potato, and coconut sauce. By early in the second year, the child was usually eating a normal adult diet.

When questioned about bottle care, most women stated that they knew how to use soap and water to clean the bottles and nipples and to use boiled water to mix with the powdered formula. Many mentioned using boiling (or boiled) water as a final rinse for the bottles. Only one woman actually reported using un-boiled water whenever that was more convenient. In many houses, the clean bottles and nipples were kept covered and boiled water was stored in a teakettle, ready for use. Fewer than half of the mothers said that the formula was made up fresh for each feeding;

others prepared a certain amount and used it for several feedings. Since only three of the 32 women who bottlefed their infants had regular access to a refrigerator, bottles of formula frequently were kept at room temperature [80°–90°F] for 6–12 hr. Uncapped nursing bottles of water were occasionally noted on the window sills and sleeping mats in houses where formula was prepared with great care. In large social gatherings, older siblings were observed playing with the bottles of formula being offered to infants.

Most mothers reported learning how to clean bottles and prepare formula from members of the nursing staff soon after they had delivered in the hospital. Others said that they had been instructed in proper bottle care by two of the hospital nurses who resided in the village. Sources of information on formula preparation cited only occasionally include: public school classes, manufacturer's instructions on the tins of powdered formula, radio announcements, female relatives, and missionaries.

The various ailments that were reported in the medical records of our sample are listed in descending order of frequency in Table 3. Most of the health problems can be grouped into three major categories: respiratory disorders (ear, nose and throat), gastrointestinal disorders and skin disorders. In addition to describing the symptoms of these problems when discussing their offsprings' health history, the village mothers reported a condition called *mi mwäng* which could afflict newborns as well as toddlers. This condition, associated with flaccid muscles, fever, crying, constipation and anuria was said to be treatable only by a type of massage known to a few Trukese. It was not described as life-threatening.

All Trukese readily make use of both traditional and Western medicine, applying pragmatic standards to each: if it works, it will be sought again in similar circumstances. Only a few of the disorders listed in Table 3 were deemed serious or life-threatening enough to warrant hospitalization. Most other illnesses were treated by hospital-prescribed medication or by simple home remedies, e.g. increased fluids, tidbits of preferred foods, or poultices when appropriate. Traditional Trukese medicine was reserved for certain conditions, such as *mi mwäng*, or certain situations, such as an illness which did not respond readily to the hospital prescriptions or an illness which occurred when relatives were violating taboos.

Table 3. Health problems reported in hospital records for Peniyesene children in the first year of life (April 1974–April 1976)

Respiratory	Gastrointestinal	Dermatological	Other
Cough†	Diarrhea due to:	Impetigo	Fever†
"Runny nose"†	unspecified cause*†	Scabies	Conjunctivitis
Sore throat	amoeba*	Skin lesions	Chicken pox
Otitis media	worms*	Unidentified rash	
Pneumonia*	viral gastroenteritis*	Boils	Mumps
Thrush	Vomiting	Hives	
Wheezing	Dehydration*	Pitiriasis	
Adenitis	Abdominal pain	Skin fungus	

\* Ailments for which hospitalization was required.

† More than 25 reports.



Table 4. Incidence of hospitalization during first year of life according to type of milk feeding

Type of milk feeding	Number of infants > 1 year old*		Number of infants < 1 year old*		Number of infants in sample	
	Total	Hospitalized	Total	Hospitalized	Total	Hospitalized
Breastfed exclusively from birth until age 1 year	8	1	1	0	9	1
Breast plus supplementary bottle for first year	10	1	10	0	20	1
Breast plus supplementary bottle for 1-6 months, then bottle only	7	1†	8	3‡	15	4
Bottlefed exclusively from birth	3	2§	2	2	5	4
Totals	28	5	21	5	49	10

\* Age at time of examination of medical record.

† Hospitalization occurred after child was weaned to bottle only.

‡ Two of the children were hospitalized after weaning to bottle only, one when supplementary bottle was used.

§ One of these 2 children was hospitalized 3 times for different problems between 5 and 8 months of life.

According to hospital records and parental reports, almost all of the children in the sample had experienced minor ailments at least occasionally during their first year of life. There were no accounts of illness for *only two* of the infants.

Table 4 shows the number of children in the sample who required hospitalization for serious illness for more than 1 day during their first year of life. Data for those children who had reached their first birthday at the time of the medical record search are reported separately from data for those who were not yet 1 yr old and were, therefore, still at risk of becoming seriously ill in their first year. Because of the small sample size, no test of statistical significance can be made. However, it is apparent that a much higher proportion of infants were seriously ill when exclusively bottlefed than when exclusively breastfed. The one child in the bottlefed group who did not become seriously ill was born with a bilateral cleft palate and took milk only from a spoon until the defect was repaired at 4 months of age.

The ages at which these 10 infants were hospitalized are given in Table 5. Because one of the 10 was hospitalized on three different occasions (at 5 months, 6 months, and 7 months of age), a total of 12 hospitalizations is indicated. Both of the major types of serious illness, respiratory and gastrointestinal,

occurred in infants under 3 months as well as in those over 5 months of age. All of those children who became seriously ill after 4 months of age had been introduced to semisolid foods at least 2 months prior to their hospitalization. Only one of these children had been given commercially jarred foods regularly.

#### DISCUSSION

This report differs from earlier, survey-type studies of the influences of infant feeding practices on patterns of infant illness in that it presents observations of all members of a certain segment of a single community over a period of several months. This has the disadvantage of examining only a small number of subjects. However, it has the advantage of providing repeated observations of the study population in a variety of situations—formal interviews in homes, casual interviews while sharing a taxi, and observations of daily village activities—all of which were cross-checked and further verified against medical records and census data.

Compared with the 1953 dietary survey of Truk District [11], our data on Peniyesene village in the 1970s indicate a much higher frequency of bottle feeding (supplementary or exclusive), a lower age for weaning from the breast for a substantial proportion

Table 5. Ages at which hospitalization\* occurred according to type of milk feeding when hospitalized

Type of milk feeding	Ages of children					Total
	< 1 month	2 months	3-4 months	5-6 months	7-8 months	
Breast only	0	0	0	1†	0	1
Supplemented breast	0	2	0	0	0	2
Bottle only	1	2	0	2‡	4‡	9
Total	1	4	0	3	4	12

\* Seven cases of gastroenteritis, 3 cases of pneumonia, and 2 cases of combined gastrointestinal and respiratory distress.

† These children had been receiving semisolid foods in addition to milk since 3 months of age.

‡ These children had been receiving semisolid foods in addition to milk since 3-5 months of age.



of infants, and a lower age for introduction of soft foods. However, it should be noted that this study and the 1953 survey dealt with related but not identical populations. The survey included residents both of the urban center and of the more traditional and isolated neighboring islands where breastfeeding remains a much more common practice. Thus, the different results reported in the two studies may be due to differences in setting as well as time. A historical analysis of infant feeding practices in Peniyesene over a thirty year period (1945-1976), however, has indicated a decreased reliance on breast milk and increased use of commercial formula and semisolid food for children under 6 months of age [17]. The traditional pattern of offering the breast until the child could walk and withholding all other food until the child had teeth was practiced by fewer than one-fourth of our sample of Peniyesene mothers.

Most Peniyesene women who bottlefed their children knew how to care for the bottles and the milk properly. However, it was often difficult or impossible for them to do so. Even in the tidiest homes, flies and roaches were common. Older siblings and other relatives, who were less aware of the importance of proper sanitation or correct measurement when preparing the bottle, were frequently responsible for the actual feeding of the infant. Refrigerators were too expensive for most families, it was inconvenient to mix up fresh formula for a small infant on a demand schedule (especially at night), and it was impossible to keep other young children away from the bottles—which contained milk, water, sweet tea, or carbonated beverages. Thus, even milk that was made with boiled water in well-washed bottles could quickly become contaminated.

The incidence of the minor illnesses which occurred in the Peniyesene infant population is not reported in this study. The willingness of different parents to take their children to the hospital outpatient clinic for minor ailments varied considerably, so that the number of recorded visits to the clinic cannot be used as an accurate estimate of the number of episodes of illness or their duration. When interviewed, mothers were able to recall that a child experienced, for example, several coughs, an occasional fever, and no diarrhea, but could specify neither frequency nor duration of these minor complaints. Life-threatening serious ailments, on the other hand, were recognized as such by Trukese parents, were treated during duly recorded admissions to the hospital pediatric section, and were recalled in some detail by the parents.

It should be noted here that breastfeeding mothers were no more reluctant to use the hospital facilities than were mothers who had begun to use infant formulas. Although hospital records (of birth, inpatient admissions, or outpatient visits) existed for five out of five exclusively bottlefed infants but for only six out of nine breastfed infants, hospital records existed for proportionately fewer of the infants who had received supplementary bottle feeding (19 out of 35) than of the infants who were exclusively breastfed. Furthermore, the three breastfed individuals without hospital records lived in extended family households in which sick children had been taken to the hospital in the recent past. The mothers of these infants would have been urged by close relatives to seek any needed hos-

pital care in the unlikely event that the mothers were reluctant.

Our data from Truk, like those of Cunningham [6] and Larsen and Homer [7] on middle class United States populations, suggest an association between mode of feeding and occurrence of serious or life-threatening illness (that which required at least overnight hospitalization). Four out of five exclusively bottlefed infants required hospitalization in their first 8 months of life, one of them on three separate occasions, while there was only one case of serious illness in the eight infants who received no bottlefeeding in their first year.

It is extremely unlikely that a life-threatening illness among the breastfed group went unreported or that a bottlefed infant was hospitalized for a minor illness. The four outcomes of serious illness are that Western medicine (provided by the hospital) ameliorates the problem, that traditional Trukese medicine ameliorates the problem, that the patient recovers without any treatment, or that the patient dies. According to our detailed census and interview data, there were no deaths or cases of "miraculous recovery" among the infants in our population during the period studied. Accounts of the two situations in our study in which Trukese medicine was said to have cured health problems considered out of the ordinary by our informants were also to be found in the hospital records—one had been hospitalized for gastroenteritis and dehydration, the other had been treated as an outpatient for recurrent otitis media and diarrhea. According to the nurses' daily reports on the inpatient charts, the infants in our study who were actually admitted to the pediatrics ward were in need of immediate professional care for breathing difficulties or dehydration.

It is possible that the hospitalized infants in this study were more likely to have been exposed to pathogenic organisms or to have had lowered resistance to such organisms for reasons other than their mode of milk feeding. Factors which might have influenced the occurrence of serious illness include general sanitation and child care practices, numbers of other children in the household, and the introduction of semisolid foods. General cleanliness and sanitary practices (window screens, covered water drums, swept floors, screened cabinets, hand soap, etc.) varied from household to household. However, households where infants had been bottlefed or hospitalized did not differ systematically from other households in this regard. The number of children living in any Peniyesene household changed frequently and it was extremely rare that only one child would be found in any household. All except one of the infants in this study lived in households with at least two other young children. Since half of the seriously ill children had no foods other than milk at the time of their hospitalization, ingestion of contaminated semisolids cannot explain all cases of serious illness. Birthweights of the hospitalized infants were similar to the birthweights of the entire sample.

The mothers of two of the five bottlefed infants were regularly employed in the wage economy and other female relatives in the extended household cared for their infants during the day. The mothers of all of the nine breastfed infants had primary—

although not exclusive—responsibility for their children's care. However, similar proportions of the infants whose mothers were (3 out of 13) or were not (7 out of 36) regularly employed outside the home were hospitalized. Thus, full-time wage employment of the mother was not related to increased incidence of hospitalization in this study.

Since reliance on both breast and bottle has become commonplace in Peniyesene, as in other parts of the world, it is important to consider the influence of the supplementary bottle on infant health. Several investigators have reported that infants given even occasional supplementary bottles of commercial formula had altered gastrointestinal flora [2, 18] and higher incidence of gastrointestinal and respiratory disease [2]. Plank and Milanesi [1] found that mortality in infants given a supplementary bottle was as high as in infants fed exclusively by bottle. Our data, however, suggest that the incidence of serious illness is lower in those infants offered the breast as well as the bottle than in those offered the bottle alone.

A final point to consider is the age at which serious illness occurred in the Peniyesene infants. All those children hospitalized within eight weeks of birth had experienced either supplementary or complete bottle-feeding. Thus, the use of any bottle may put the very young at greater risk.

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#### REFERENCES

1. Plank S. J. and Milanesi M. L. Infant feeding and infant mortality in rural Chile. *Bull. Wld Hlth Org.* **48**, 203, 1973.
2. Mata L. J., Kronmal R. A., Garcia B., Butler W., Urrutia J. J. and Murillo S. Breast feeding, weaning and the diarrheal syndrome in a Guatemalan Indian village. In *Acute Diarrhoea in Childhood. Ciba Symposium*, **42**, 311, 1976.
3. Landman J. P. and Shaw-Lyon V. Breast feeding decline in Kingston, Jamaica, 1973. *W. Indian med. J.* **25**, 43, 1976.
4. Dugdale A. E. The effect of the type of feeding on weight gain and illness in infants. *Br. J. Nutr.* **26**, 423, 1971.
5. Research Sub-Committee of the Southeast England Faculty of the Royal College of General Practitioners. The influence of breast feeding on the incidence of infectious illness during the first year of life. *Practitioner* **209**, 356, 1972.
6. Cunningham A. S. Morbidity in breast-fed and artificially fed infants. *J. Pediat.* **90**, 726, 1976.
7. Larsen S. A. and Homer D. R. Relation of breast vs bottle feeding to a hospitalization for gastroenteritis in a middle-class United States population. *J. Pediat.* **92**, 417, 1978.
8. Baker F. L., Vitale J. I., Cromer M. A., Osler D. C. and Cunningham A. S. Breast versus bottle-feeding—correspondence. *J. Pediat.* **92**, 864, 1978.
9. Zeitlin M., Masangkay Z., Consolacion M. and Nass M. Breast feeding and nutritional status in depressed urban areas of greater Manila, Philippines. *Ecol. Food Nutr.* **7**, 103, 1978.
10. U.S. Trust Territory of the Pacific Islands. 1973 *Census of the Trust Territory of the Pacific Islands*. Office of the High Commissioner, Saipan, 1973.
11. Malcolm S. *Diet and nutrition in the Trust Territory of the Pacific Islands*. South Pacific Commission Technical Paper, No. 83, Noumea, New Caledonia, 1955.
12. Gonzales N. L. S. Breast feeding, weaning and acculturation. *J. Pediat.* **62**, 577, 1963.
13. Ghosh S., Gidwani S., Mittal S. K. and Verna R. K. Sociocultural factors affecting breast feeding and other infant feeding practices in an urban community. *Indian Pediat.* **13**, 827, 1976.
14. Hirschmann C. and Sweet J. A. Social background and breast feeding among American mothers. *Soc. Biol.* **21**, 39, 1974.
15. Kincaid P. J. *Trust Territory of the Pacific Islands Nutrition Survey*. Dept. of Health Services, U.S. Trust Territory of the Pacific Islands, Saipan, 1973.
16. Gilbert D. and Moses E. *Truk Nutrition Survey, Summer, 1974*. Report prepared for International Health Program, School of Public Health, University of Hawaii, Honolulu, 1975.
17. Marshall L. B. and Marshall M. Breasts, bottles and babies: historical changes in infant feeding practices in a Micronesian village. *Ecol. Food Nutr.*, in press.
18. Bullen C. L., Tearle P. V. and Stewart M. G. The effect of "humanised" milks and supplemented breast feeding on the faecal flora of infants. *J. med. Microbiol.* **10**, 403, 1977.

## THE UTILIZATION OF TRADITIONAL MEDICINE— A MALAYSIAN EXAMPLE

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**Abstract**—This paper documents interviews with 100 people who had come to consult a traditional Malay healer, or *bomoh*. Many people use several types of health care resources. Traditional and cosmopolitan systems are not perceived as antagonistic: a *bomoh* will often refer patients to cosmopolitan practitioners and will reinforce compliance with cosmopolitan treatment regimens. Cosmopolitan medicine's inattention to the affective aspects of healing—its concentration on disease rather than illness—is an important reason why Malaysians are reluctant to use cosmopolitan services, and is one reason why the *bomoh* is consulted for physical as well as for psychological complaints.

### INTRODUCTION

In a small town at the edge of Malaysia's richest rice land, not far from the backlands where the mountains begin, there lives a frail, religious man, a Haji (one who has made the pilgrimage to Mecca) to whom people flock, sometimes more than a hundred in a day, in search of relief from ailments or solutions to other problems. More than 70 years old, this man is one of the best known *bomohs* (traditional Malay healer) in the state of Kedah in northwestern Peninsular Malaysia. People refer to him as Tok Guru (Master). Farmers and businessmen, housewives and police officers, teachers and students come to him from the surrounding area and from afar. They come with physical and mental complaints, with ailments caused by witchcraft, or simply for luck. Most carry a bottle of water and bundles of *Sireh* or betel leaves, and often also, they carry betel nuts. According to an imported Javanese belief, these items are the royalty of all medicines.

Tok Guru consults people while seated at a small table in the shade under his house. Many people come to him after other therapies have failed, or to complement another form of treatment, or to safeguard a cure already achieved. Others consult Tok Guru before they use other resources. His manner resembles that of an ideal psychiatrist [1] or trusted family doctor [2] in our society. His presence is extraordinary. He appears authoritative, and at the same time he jokes with patients, gently chiding and advising them. He blesses the water and the *Sireh* offerings they bring, reads Koranic verses and performs *jampi* (incantation). He may blow or spit a blessing in a child's face, and he may recount a recipe for an herbal tea.

I once saw him whisper an incantation while placing his right foot on a baby's face. The father later testified that the unsightly blemish that Tok Guru touched with his big toe was reduced by this therapy, yet it had been treated unsuccessfully by a succession of cosmopolitan medical specialists.

Patients sit among the stilts of the house—the women to the back and the men at the sides—talking and occasionally looking toward the curer's table. Seemingly uninterested in the action there, they never

miss a thing, and they are appreciative when the *bomoh* now and again directs a joke to the whole "audience". The atmosphere is casual, familial, and respectful.

Tok Guru explained his powers to me in a humble manner: "There is nothing to say, it is simple, there is nothing complicated, it just happens—the power comes from Allah, it is Allah who heals". More precisely, he claims to be an instrument of Allah's messenger, Malaikat. He first demonstrated healing powers during the second World War when other means were not available and he cured a friend by blessing the water which he was given to drink. He reads the Taba and Yasin sections of the Koran daily, an activity that is commonly believed to cultivate intuitive healing power.

We interviewed one hundred people who attended Tok Guru's sessions. These interviews document healing practices that are widespread in Malaysia. Compared to Mesoamerica or some parts of Africa, relatively little has been published on the ethnography of healing practices in Malaysia. As is often the case in developing countries, modern minded Malaysians refer to these practices as a remnant of traditional culture that survives only among a few ignorant and superstitious country folk. In fact, they involve both urban and rural people with many degrees of knowledge and sophistication.

### PROCEDURES

We used a list of open-ended questions to interview people waiting to see Tok Guru. The interviews were conducted over a two month period in 1977. We attempted to interview recently arrived people so that no one would be detained after receiving treatment, but this was not always possible. The interviews were conducted by Abdul Rashid bin Abdul Razak and Mahani binte Mahmud. Each interviewee was assured confidentiality. Participation was voluntary, and those who participated were instructed not to answer questions they did not want to answer.

The interviewers tried to detect responses which indicated a person was trying to please them by giving answers they thought the interviewer would approve, rather than answering in a manner that expressed

Table 1. Occupation of interviewees

Farmer	50%
Business person	11%
Student	11%
Housewife	11%
Teacher	4%
Military/Police	4%
Other	5%
No answer	4%

their own beliefs. In this event the person was encouraged to express himself fully. On the whole, we were impressed by the openness of the responses, yet 63% of the respondents did not wish to reveal their level of schooling. This indicates a degree of reserve with the interviewers, who represented people with a slightly higher level of education.

#### RESULTS AND DISCUSSION

Of the 65 males and 35 females interviewed, 40 were patients, five were friends of patients and 55 were relatives of patients (usually a parent or spouse). Only one of the interviewees was Chinese and one Indian, the rest were Malay. Thirteen of the patients were less than 10 years old, 27 were between 10 and 20 years old, and 53% were under 30 years of age.

As can be seen from Table 1, one-half of those interviewed identified themselves as farmers and 54 identified the head of their household as farmers. In all, 71 interviewees identified themselves as rural dwellers and 29 stated they lived in urban areas. However their definition of urban is subjective so the latter figure could be inflated, although a number of people did come from Alor Star, the state capital and from as far away as Kuala Lumpur, the national capital.

The composition of the households of patients corresponded with that of the country as a whole: 53% of the households had 1, 2 or no children and 24% had 3 or 4 children. (This is actually a lower average than indicated in the 1970 census report for the state of Kedah [3].) For 60% of those interviewed, total income for all working members in a household was M \$200 or less a month; only two households had monthly incomes of more than M \$1000. It can be seen that the majority of the interviewees belonged to households poorer than average, though not necessarily poorer than an average rural Malaysian. The incomes are on a par with the income range of a decade ago when 64.6% of all Malaysian households had an income of less than M \$200 per month [4].

Table 2. Type of complaints or problems presented

Help with—	% of respondents
Study/interview/exams	42%
Physical problems (including psychosomatic complaints)	37%
Traditional illness categories (including charms)	12%
Psychological complaints	8%
No response	1%

In 1977, it was estimated, however, that households with incomes of less than M \$300 per month were at the poverty level but that 50% of the population was at this level [5].

Interviewees were generally sedentary, 40% having lived in the same place for 20 or more years and 30% for 10–20 years, although 29% had lived in other states of other districts before moving to their present dwellings.

Table 2 indicates the type of complaints for which the *bomoh's* help was sought.

60 patients had visited the *bomoh* before, 40% for the same complaint. Two patients who were returning with the same complaint stated that the problem had worsened, four that it had remained the same and the majority that improvement was evident. Of those who had been to the *bomoh* previously for a different problem, 31 stated that they had been helped, compared to five who felt they were not and two who were uncertain.

25 patients had also tried one other type of health resource for the present problem, an additional 18 had been to more than one resource, as indicated by Table 3. The majority of these patients (33) who had sought other help earlier felt they had not been helped by these other resources, five felt they had been helped, three were not certain; and two declined to answer.

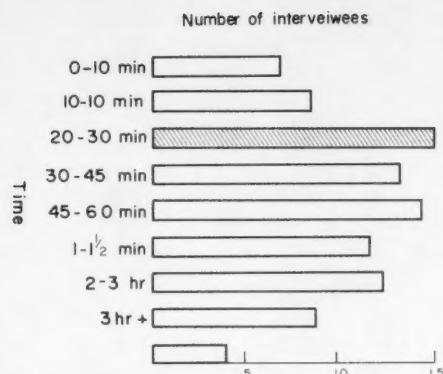
The majority of the patients (87) had been recommended to the *bomoh* by friends (53), neighbors (16) or relatives (18) and others stated simply that they "knew the *bomoh*". 72% stated they knew someone who had been helped by the *bomoh* and almost half of these indicated that the problem involved was the same for which they now sought help.

54 respondents claimed that the *bomoh* and the hospital (cosmopolitan medicine) provided different but complementary types of treatment. Patients said that one system was preferred over another depending on the kind of illness. 17% felt the *bomoh* gave "better care" in general and had more concern for the patient

Table 3. Other health resources used for the same problem by patients (N = 43)

Resource	Patients having tried one other resource only (N = 25)	Patients having tried several other resources (N = 18)
Rural Clinic	4	5
Private Physician	5	8
Hospital	9	15
Drug store	1	1
Other <i>bomoh</i>	5	13
Police	1	—



Fig. 1. Time spent in travelling to see *Bomoh*.

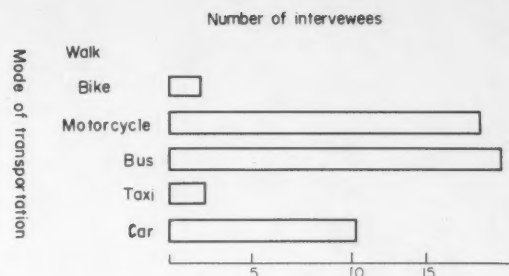
than hospitals or clinics but six felt it best first to go to the clinic or hospital for an ailment and only to consult the *bomoh* if that did not work.

Figures 1 and 2 indicate the time spent travelling to see the *bomoh* and the mode of transportation used. Figure 3 indicates the length of time the patients felt they had had the problem.

Of the 56 who answered the question regarding payments, six paid the *bomoh* more, 33 paid less and 15 paid the same as they said they would pay elsewhere (see Table 4).

The vast majority (92%) stated that they felt (or were convinced they would feel) better for having seen Tok Guru. The reason most often stated for this was that he made patients confident that the problem could be solved, a feeling linked to the belief that Tok Guru as a religious man had the power of Allah working through him. 28% stated that the reason for their confidence (and for feeling better) was that Tok Guru's treatment had worked before, either for them personally or for someone they knew.

Most of the interviewees who had previously used another source of help came for a physical problem. The majority (86%) of those with physical problems had already been elsewhere, whereas only 12% of those who came for help with exams, study or inter-

Fig. 2. Mode of transportation used to reach the *Bomoh*.

views had tried another source of help for that problem. About half of those with psychological problems or traditional, spirit-based illnesses had been elsewhere, but there were few such patients so that these figures were not significant.

The farmers, constituting 50% of those interviewed, seemed to make greater use of Tok Guru's services for physical problems than those of other occupations; 46% of the farmers but only 28% of all the others came for physical complaints. Only 39% of the farmers had been elsewhere for their problems, whereas 50% of the others had sought other help. Conversely 73% of the farmers had been to Tok Guru previously (for the same and/or different problems) whereas only 57% of the others had had previous contact. As a group, the farmers live closer to Tok Guru than the others, a factor that might have influenced the difference.

Of those who gave a pragmatic reason for going to Tok Guru, 72% were farmers and 28% non-farmers. (Those who indicated they felt better after coming to Tok Guru because they had been cured previously, or because they knew of others who had been cured, were considered to have come for pragmatic reasons as opposed to those who were indefinite about why they felt better saying simply: "he gives me hope", or "I have faith in him".) There is little difference between farmers and the others in the length of time they feel they have suffered their complaint.

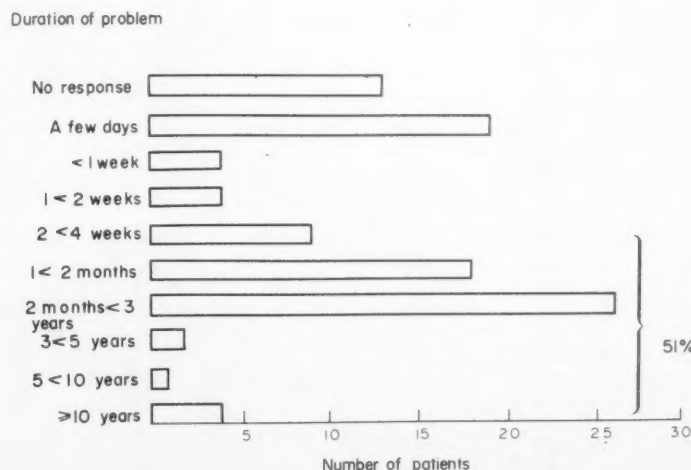


Fig. 3. Length of time the patient had had problem.



Table 4. Indicated payment to the *bomoh*

	Amount	No. of patients
1.	Nothing	2
2.	Don't know	2
3.	"What one wants (probably M\$ 1)"*	23
4.	50 ¢	6
5.	One ringgit (M\$ 1)	27
6.	Two ringgit (M\$ 2)	17
7.	Three ringgit (M\$ 3)	1
8.	More than 5 ringgit (M\$ 5)	1

\* US\$ 1 equals 2.20 ringgits (M\$ 2.20).

Income, educational level (when indicated) and age (except for exam/study problems) were not indicative of the type of problem for which help was sought.

49% of the women and only 39% of the men consulted Tok Guru for study/interview problems. This ratio was reversed for physical complaints: 41% of the men but only 31% of the women had physical complaints.

The duration of the problem or illness could be directly correlated to how many health resources had been used: 49% of the multiple users had had the problem for 2 months or more but only 27% of the patients who had only consulted Tok Guru had had the problem more than 2 months (Table 5).

These data may be influenced by the large number of people who come for study/exams problems. However, it is not necessarily true that the concern about an exam or doing well in school is a short lived, periodic preoccupation.

#### DISCUSSION

Except for ethnicity, there seems to be no significant way in which those making use of the services of this *bomoh* can be distinguished from the rest of the population of Kedah—the home of most of the patients.

Although 71% of those interviewed described themselves as rural, other *bomohs* are not consulted primarily by rural dwellers. Nor are *bomohs* a health resource used only by the most "traditional," or isolated, segments of the population. A considerable portion of the patients not only lived in urban areas but they had also lived in a number of districts. Other studies have reported the practice of *bomohs* in urban

areas, and I have observed *bomohs* in Kuala Lumpur who see more than 100 patients a day.

Tok Guru may not cure all the patients who come to him, but he assists a great number of them. Those who had been to see him previously felt that they had been helped. The majority of those who had been elsewhere had come to Tok Guru because they felt they had not been helped. This confirms observations by Reading [6] and Osman [7] that "Feeling well is as important... as being well". The importance of how a patient feels about a health resource is illustrated by cases I, III and IV in the Appendix.

Tok Guru may (directly or indirectly) cure specific diseases, in addition to making the patients *feel* better, but in some cases a different kind of treatment might be preferable. Tok Guru frequently tells a patient that, although he might assist in healing certain aspects of the problem, the hospital would be the best place to cure other aspects of the illness.

Despite the limited attention cosmopolitan medicine pays to the affective side of healing, it is by now fully recognized that this aspect is of great importance [6, 8, 9]. As a healer, Tok Guru encourages a positive feeling and religious faith, which are of curative value for psychological and for physical ailments. Research on the placebo effect and mind/body interactions explores the nature of these therapeutic processes [9, 10].

Hartog noted that in Malaysia "new crises" such as school exams, the stress of some urban and professional jobs and the trauma girls suffer when they go away to school, are not dealt with by traditional institutions which provide a crises intervention system [11]. Tok Guru handles these crises in significant proportion of his consultations.

A new book by Pelletier [12] is one of numerous recent works that points to the limitations of the biomedical approach to medical practice:

"It is increasingly unlikely that any pharmacological panacea will resolve the fundamental issue of illness and health. Both the benefits and limitations of surgical and chemotherapeutic intervention should be acknowledged.... Researchers and clinicians now need to investigate the means of reducing stress rather than concentrate most of the effort on the disorder that is the end result" (p. 35) [12].

92% of the people in our study indicated that they felt, or would feel, better after seeing Tok Guru. Since 86% of those with physical problems had already used other health resources (primarily cosmopolitan medicine), seeing a *bomoh* did not involve denying the value of cosmopolitan medicine. An illness thought to have natural causes may later be attributed to a

Table 5. Health resources used and duration of problem

Duration of problem	Having used other health resources (N = 43)	Having only visited Tok Guru for this problem (N = 45)	No Response (N = 12)
1 month	12 (28%)	22 (49%)	
1-2 months	7 (16%)	11 (24%)	
2 months	21 (49%)	12 (27%)	
No answer	3 (7%)	—	
Total	43 (100%)	45 (100%)	

spirit/charm, or to a breach of *adat* (customs). The use of cosmopolitan medicine in this case would be followed by resort to a *bomoh*. Our interviews showed that most people expect rapid, almost miraculous cures from cosmopolitan medicine. If this does not occur, they may assume that the treatment was inferior and that another cosmopolitan practitioner should be consulted, or that cosmopolitan medicine is inappropriate. In the latter case the illness is reinterpreted. Table 5 indicates that patients who had had problems for a long period also consulted a wider variety of health resources.

### CONCLUSIONS

The use of traditional healers is a common phenomenon in Malaysia. This study shows that those who consult these practitioners are representing the population at large. Their complaints are not primarily traditional (charms, spirit-possession, hysteria, etc.) but are physical and psychological (including anxiety due to such events as exams, study and interviews).

The people who consult traditional Malay healers also use cosmopolitan health services. The longer an ailment persists, the higher the probability that people will attribute it to a supernatural cause, and thus make a *bomoh* the most appropriate healer to consult. Our interviews support the hypothesis that a large proportion of the population believe that cosmopolitan medicine is a partial healing system that neglects the socio-psychological and spiritual aspects of healing. Patients stated that the *bomoh* was particularly adept at making people "feel better". Feeling is pivotal in deciding which health resource to use.

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### REFERENCES

1. Fuller T. E. *The Mind Game, Witchdoctors and Psychiatrists*. Bantan Books, New York, 1972.
2. David J. A. Medical practice and tribal communities. In *Health and Disease in Tribal Societies* (Edited by Elliott K.). Ciba Foundation Symposium 49—New Series. Elsevier, North Holland, 1977.
3. Jabatan Perangkaan Malaysia. *1970 Population and Housing Census, Malaysia: Volume I—General Housing Tables, Part X*. Kedah. Kuala Lumpur, August, 1972.
4. Jabatan Perangkaan Malaysia. *Socioeconomic Sample—Survey of Households—Malaysia 1967–68*. Kuala Lumpur, June 1974.
5. Mohd. Nor b. Abd. Ghani. Remarks made at the National Seminar on the Social and Ecological Impact and Problems of Development. Penang, Malaysia, 4–5 October, 1977.
6. Reading A. Illness and disease. *Med. Clin. N. Am.* 61, 703–710, 1977.
7. Mohd. Taib Osman. The Bomoh and the practice of Malay medicine. *S. E. Asian Rev.* 1, 1, 16, 1976.
8. Kleinman A. *et al.* Culture, illness, and care—clinical lessons from anthropologic and cross cultural research. *Ann. intern. Med.* 88, 251, 1978.
9. Kiev A. *Magic, Faith & Healing*. Free Press, Glencoe, New York, 1964.
10. Moerman D. E. Anthropology of symbolic healing. *Curr. Anthropol.* 20 (1), 59, 1979.
11. Hartog J. The intervention system for mental and social deviants in Malaysia. *Soc. Sci. Med.* 6, 211, 1972.
12. Pelletier K. R. *Mind as Healer, Mind as Slayer*. Delta, New York, 1977.

### APPENDIX

#### Case I

A 27-year-old farmer travelled 30 min by car to see Tok Guru. He complained of frequent tiredness, difficulty in breathing, restlessness during the evening and what he called "spasmodic asthma". He believed the problem originated from doing too much heavy work in his rice field which gave rise to a headache, and subsequently to his present symptoms which began "a few days ago". There are two adults and two children in his household, and the household has a monthly income of less than M\$ 200. He had never been to Tok Guru before but had heard from his uncle that Tok Guru could cure this type of complaint. He had previously been to a rural health clinic as well as to a hospital and at both places he had received medicines but was not cured.

The patient came with his brother-in-law. They brought *Sireh* leaves, betel nuts and a bottle of clean water. He believed that Tok Guru could discern the cause of the ailment by looking at these items and that the primary means of curing came through blessing the water. He believed that Tok Guru receives guidance and healing power from Allah through a messenger or Khadam (servant). He claimed he had confidence in, and felt good about seeing the Tok Guru because his brother-in-law had been cured of the same problem.

The brother-in-law indicated strong dissatisfaction with the treatment received at the hospital because (1) the patients have to wait for many hours before receiving treatment, (2) he felt the patients were not properly examined by a doctor and (3) the patients became frustrated because they had no chance to explain the problem. Because of these failures "the hospital did not provide the right prescriptions", and the patient had not gained relief. It was "much easier to consult with Tok Guru and to express the problem". "Tok Guru listened and showed sympathy", and was therefore able to provide an effective cure.

#### Case II

The patient was a 22-year-old man employed as a "hostel steward" and living at the outskirts of the state capital of Alor Star. He travelled 20 min by bus

to Tok Guru. He came alone. He had always lived at his current address, a household that currently contained five people. His complaint was "difficulty in breathing" which he "suspected to be TB". He had had symptoms for 10 months. He not only believed that his ailment was the result of "long hours of work in the padi fields" and "lack of rest" but that it might also be due to the fact that he "often attended Koran reading competitions and weddings" making others jealous, wanting to charm him.

He had not been to the *bomoh* previously but for his current ailment he had gone to a rural clinic, to a hospital and to a private physician. He was advised by the government clinic to receive treatment there on a regular basis. He felt that he was helped by the clinic treatment, but he visited Tok Guru to make sure that he was not charmed.

He knew people who had chest pains and had been advised by a doctor to have surgery, but who had rejected this advice and had been cured by the *bomoh*. He also knew of a baby that had difficulty urinating and was unsuccessfully treated by doctors but "successfully treated by Tok Guru".

He felt that the difference between "hospital medicine and *bomoh* medicine" was that the hospital "diagnoses with modern medicine" and the *bomoh* "relies on the blessings of Allah". He believes, however, that this Tok Guru is different from other *bomohs* because he does not go into trance and is not associated with any *hantus* (spirits). He is an exemplary muslim who believes in the verses of the Koran. Tok Guru told the patient that he was not charmed but that he might possibly have tuberculosis. (He told the patient, after examining his hands and tongue, that those who have, or might have tuberculosis have a whitish tongue or have a white spot on their tongue.) Tok Guru told him not to worry and *strongly advised him to continue the treatment from the clinic*.

#### Case III

The patient was a 20-year-old woman with a "hole in the heart". The person we interviewed was a teacher and a friend of the woman's father. The father and the interviewee came with the patient and her mother to seek Tok Guru's help. They travelled almost 2 hr by car from their home in a rural village in the state of Perlis.

Apparently the patient had the problem since childhood but only started complaining about it during the past several years. The friend had been to the *bomoh* previously in order to get a winning lottery number, but the *bomoh* refused to be concerned about such things and did not attempt to help him.

The patient had been to the hospital several times for the problem, but the father was seeking Tok Guru's help so that his daughter wouldn't "be dejected". He hoped that "through the blessing of the water" she would no longer be afraid that she would die. The father had been told by the hospital doctor that the patient had little chance of surviving and that further treatment was useless. The interviewee felt that the hospital might have given inadequate treatment to the patient, and was critical of the fact that the patient had been left with no hope.

The father felt better after going to the *bomoh* because Tok Guru had a reputation as a religious man who receives power to heal from Allah. The father hoped his daughter would recover, and expected that she would also be hopeful. The interviewee stated that most village people were quite reluctant to go to the hospital because of the "rough and ungente way they were treated by the nurses and doctors" which "sometime made them feel worse than did the illness for which they had come". The teacher felt that "it is their feelings that should be taken care of first rather than the illness (disease)". He felt that the lack of attention to "human feeling" was the reason many Malays go directly to the *bomoh* or go to the *bomoh* even though they have been to the hospital, because the *bomoh* can "ease out their worry".

#### Case IV

A 21-year-old air force officer with a high school education travelled alone 45 min by bus from the state capital to Alor Star to see Tok Guru about reducing his nervousness and fear of flying. He had consulted Tok Guru earlier about an examination which he passed "because of the *bomoh's* help". He had not gone elsewhere for help with his present problem. He felt that the difference between "hospital medicine" and the *bomoh* was that the former operated on a "scientific basis" and the latter within a spiritual realm. He felt that the *bomoh* received special powers from his ancestors and through his pilgrimage to Mecca. The patient said he had faith in Tok Guru's prayer on his behalf—and "felt good" as a result of seeing Tok Guru.

#### Case V

The patient was a 31-year-old married teacher, with no children and an income of around M\$600 a month. He spent close to an hour coming alone by car from his home in one of the larger towns of Kedah.

He came to see Tok Guru because his house had been burgled twice, but he was particularly concerned that someone might be trying to charm him. During each burglary one of his old shirts had been stolen. Although the thief had taken a number of things, he had not taken the newer clothes, but only an old sports shirt that the patient feared was being used to charm him.

He had been to Tok Guru before and he also had a friend who was "receiving protection against harm" from the Tok Guru after someone robbed him three times, each time stealing an old shirt and his wife's bras. He felt that by incantations and "blessing of the water" the *bomoh* could help him.

The teacher told about a convict who escaped from a police station. The officer in charge came to Tok Guru for assistance and was told that Tok Guru would try to "darken the convict's vision" so that he would feel badly about escaping and would give himself up within 3 days time, "which is exactly what happened".

## PROBLEMS IN THE DEFINITION AND CLASSIFICATION OF MEDICAL SYSTEMS

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**Abstract**—The paper has two basic parts. The first deals with definitions and terms. Discussed are: uses and definition of "medical system"; the question of "pluralistic" medical systems; simple and complex medical systems; the problem of multisystemic configurations; "sympatric" and "allopatric" systems; dominant and variant medical systems; sub-systems and marginal systems; problems in the conceptualization and use of "professional", "popular", and "folk" medicine. Some new definitions and usages are proposed.

The second part of the paper concentrates on attempts to type or classify medical systems. Geographic, healing-task, paradigmatic, world view, social structural, ecological, societal, and other typological bases are examined, and their relative advantages discussed. A summary of readily usable typological criteria is presented.

Overall, the goal of the paper is to call into attention our rather uncritical abandonment to "common usage" of the definition and treatment of key concepts and terms relevant to the functional and comparative analysis of medical systems.

### WHAT IS A MEDICAL SYSTEM?

#### *What is medical?*

It is not unusual for a discipline to exhibit wide disagreement on the meanings and usage of terms and concepts. This, after all, reflects a rich diversity of experience and theoretical perspective among its representative scholars. For Medical Anthropology, this variety would be a surfeit of riches indeed, if only its panorama of problem orientations and cross-culturally derived perspectives were capable of fitting within an overall unifying paradigm of health and healing. But no such paradigm exist. In particular, there is still no agreement on the definition, contents, and varieties of that most basic concept—the *medical system*. Leslie offers an explanation in suggesting that "the empirical orientation of (anthropological) work has made it possible to go forward with a minimum development of theory concerning the nature of medical systems" [1]. Whatever the reason behind this lag, the time has certainly come to stop ceding uncritically to "common usage" the responsibility for establishing definitions and parameters of our most basic concepts. In the pages that follow, I should like to review our use of some major definitions, models, and arguments, and propose some refinements. Only through conceptual clarification and the identification of weaknesses and potential utility in classificatory models, can we fuel that dialog which will lead toward consensus and, ultimately, toward more focussed research and theory-building.

The definitions of "medicine" and "medical systems" are often incomplete and counterproductive. There is no definition which does not contain items contradicted by others. "Medicine," said W. H. R. Rivers [2],

... is a term for a set of social practices by which man seeks to direct and control a specific group of *natural* phenomena ... which lower his vitality and tend towards death" (p. 4; emphasis mine).

We are immediately confronted with the question of whether social practices directed toward *supernatural* phenomena constitute a medical system. W. E. Mitchell [3] contends that *medical* systems stress only "naturalistic rationales and practices". All other curative systems are of a different order. Mitchell is closely echoed by Croizier [4, p. 5] who defines a "medical" system as:

a theoretically articulated body of ideas about disease causation and treatment obtained in a written tradition and practiced by men whose knowledge of that tradition causes their society to recognize them as medical specialists.

Both Mitchell and Croizier at least include Ayurvedic, Yunani, and classic Chinese systems as "medicine". Hughes [5] grants all curative systems a *medical* status, yet sets Western biomedicine apart from all other systems, which he labels *ethnomedicine*. The implication of such usage is that nonWestern medicine is culturally generated, while biomedicine is a natural system of some sort, and independent of ideological, cultural genesis. The same unfortunate implication is perpetuated by Chrisman's distinction between "scientific" and "lay" health practice within the U.S. The scientific "health system" is "biomedical". The lay is "ethnomedical" [6]. It would seem far more productive to abandon the term "ethnomedicine" entirely, retaining only the usage "ethnomedical" as a term describing a *type of study* (rather than type of system) that focuses upon the ideological and cultural bases of *any* medical system, including the official sector of Western biomedicine [7].

Ackerknecht also distinguishes sharply between modern "Western" medicine and "primitive" medicine. Primitive medicine, he contends, is largely magicoreligious and cannot be analyzed in universal terms which could include Western medicine [8]. In truth, the lumping of one, or perhaps several medical systems in contrast with all others is not unlike the lumping of human races into two categories: "cauca-



sian" and "other". It focuses upon the characteristics—most usually a few selected characteristics—of one system as the typological bases for all systems. Lacking the characteristics of the type system—Western medicine, in this case—all other systems are largely indistinguishable from one another. "They all look alike." Sigerist [9] in the introductory volume of his massive *History of Medicine* (p. 191), seems to sum up this point of view when he notes that

... primitive medicine, as it appears within the various culture patterns, consists of a relatively small number of elements, which are very much the same in all primitive cultures and vary only in their combination.

Such ethnocentric, Western-focussed categorizations lead but to simplistic dichotomies. Others avoid this by offering definitions general enough to encompass all systems and treat them as institutional equals. Yet there are still problems.

To Glick, a medical system is

a patterned set of ideas and practices having to do with illness [10].

So far as it goes, this is a workable, straightforward definition. Like a number of other anthropologists, however, Glick worked in a culture which placed high symbolic significance upon sickness and its cure. Thus, Glick defines as "illness" only those responses to disease which have symbolic, interpersonal or moral implications. As he puts it, if a poisonous insect bite requires only that the victim himself apply a simple herbal plaster, neither the bite nor the response constitute illness, and therefore do not fall within that society's medical system [11]. Clearly this is unsatisfactory. If we agree that "illness" constitutes the behavioral aspect of sickness, then the herbal plaster application is certainly behavior, and further reflects significant cultural views about categories of illness, types of treatment (selfcure vs involvement of others, for example), etc. In short, insect bites and the most mundane of human responses to them must constitute illness and medicine.

With certain qualifications we can agree with Fabrega's assessment that "medical" behaviors consist of "all activities or considerations" that bear upon the effects of disease. If we are to exclude any behavior, it must be that which is *non deliberate*. Medical systems, suggests Dunn [12], must include only deliberate behavior that affects health—not incidental behaviors with latent health functions. Totemic taboos, ritual purity, and a host of other customs which unknowingly affect health are not medical behaviors. Indeed, at some level, it could be argued that every behavior has some effect upon health maintenance or susceptibility to disease.

Thus far, we have seen a rather uncritical interchangeability of the terms *medicine* and *medical system*. Is a sharp distinction between the two really necessary? Landy believes it is, and offers the following definitions:

"A society's *medicine* consists in those cultural practices, methods, techniques, and substances, embedded in a matrix of values, traditions, beliefs, and patterns of ecological adaptation, that provide the means for maintaining health and preventing or ameliorating disease and injury in its members."

A society's *medical system* is the total organization of its

social structures, technologies, and personnel that enable it to practice and maintain its medicine (as defined), and to change its medicine in response to varying intracultural and extracultural challenges" [46].

Here we see an interesting differentiation. "Medicine" becomes the *cultural* manifestation of health-related phenomena—values, rules, material, and means. The "medical system", however, is the *social* manifestation of health-related phenomena. It is strictly behavioral; specifically, interpersonal and organizational. Medicine itself appears to fit into the medical system only insofar as it is socially and organizationally expressed.

I believe that the distinction between cultural (ideational, practical) and social (structural, organizational) medical phenomena is quite useful. The two should occupy places of equal importance within the concept of "medical system", however (Landy's definition appears to downgrade the importance of cultural elements to the medical system). Frequently, the two are inextricably linked insofar as a specific medical practice is the exclusive charge of a specific role incumbent or group.

At any rate, if we limit the definition of "medicine" to values, practices, and materials, then it cannot properly be equated with "medical system", which subsumes all of this *plus* roles and organizations charged with the maintenance of medical values and performance of medical acts. Unfortunately, many of us employ just such a form of "doublethink" and "double-use". When we say "Western medicine" or "folk medicine" we usually refer to whole systems with their full panoply of beliefs, practices, and social structures—unless, of course, we are referring to penicillin injections or rituals chants. So long as there is no confusion (the context usually takes care of that), I believe we can go along with multiple usages of "medicine". At present, to attempt an overly constraining definition might prove futile, if not counterproductive.

#### *Problems with medical pluralism: What is a system?*

How diverse can be the sub-elements of a medical system and still constitute a single system? Field argues that "a society may, and often does, have more than one medical system, and they may well overlap each other, but it may be argued that the totality of such systems constitutes *the* medical system of that society, in contrast with other (non-medical) systems" [13]. Leslie refers to all of India's medical practices as constituting but one "pluralistic medical system" [14]. Thus, India's one overall medical system contains local folk complexes, vitamin fads, Yunani, Ayurvedic, homeopathic, Western and other kinds of medicine.

Unfortunately, the concept of "system" has some very clear traditional meanings. It may be counterproductive to use "system" with reference to the mere presence of diverse elements within a society, even if these elements all serve a single institutional sector. A system is a functionally integrated entity with intercommunicating parts. Change in one sector will require changes in others so that equilibrium is maintained [15]. Thus, the notion of a "pluralistic medical system" containing sub-systems with diversely based paradigms and little or no two-way communication and influence among the parts does significant vio-

lence to our concept of "system" [16, pp. 11-12]. From an *etic* perspective, the medical systems of India, as a group, should not be viewed as constituting one—even "pluralistic"—system. This is not mere definitional nitpicking. For by treating each of the co-existing traditions as an ideally true system, we can more clearly identify, and determine the implications of, syncretization, dual-use, and direct competition among their elements. We must assume that each system in the first place provides a broad array of conceptual and behavioral tools with which to respond to sickness. Then the question of why constituent systems decrease in importance, adopt elements of other systems, or attract one constituency rather than another assumes more importance than would be the case if all were conceptually lumped as parts of a single overall well-integrated health system.

But what of *users* and the *emic* definition of medical "systems?" Kleinman has asked whether the definition and limits of a medical system are to be found in the hospitals, the community, or in the "minds of patients and healers" [17]. Indeed, says Kleinman, "it may only be possible to discern a total system in the way that system is perceived as a cultural form and activity by members of a given culture" [18]. "Perceived" is the key word here. For the mere *use* by an individual (or hospital or physician) of elements of diverse systems need not imply that all are viewed as part of a single system.

Human minds may be the locus of large portions of a culture, yet human minds also compartmentalize cultures into a multitude of contextual and institutional domains for filling a multitude of needs. Often, organizational or behavioral elements of diverse institutions can provide complementary functions. It can be doubted, however, whether the cautious traveller views a "Hail Mary" and an oil change as constituting parts of a single preventive maintenance system if he resorts to both before starting out on a road trip. He is well aware that they reflect distinct, non-interacting paradigms.

Like members of loose-knit interpersonal urban networks [19], medical systems may be linked only through the ideosyncratic needs and actions of specific individuals, rather than through direct functional interdependence. Press [20], Schwartz [21], Garrison [22], and many others have demonstrated that individuals are quite capable of "dual use" of distinct medical systems, while being fully aware of the paradigmatic and methodological differences between them. Indeed, this awareness underlies the individual's ability to selectively "shop around" among them or to obtain alternative continuing care after the prescribed hierarchy of resort within one or another of the systems has been exhausted. Similarly, the Western biomedical physician who uses Ayurvedic or other variant techniques and explanations to better encourage the trust and compliance of his traditionalist clients is almost always quite aware of the paradigmatic contradictions implied in the treatment strategy. He employs the variant techniques precisely because he lacks the proper tools (be these mechanical ideological or interpersonal) in his primary system of allegiance [23].

In sum, the mere presence of variant practices in the medical repertoire of individuals or professionals

does not imply that they constitute a functionally integrated system. Our task must be to determine the extent to which users of the particular medical configuration under study conceptually compartmentalize the various elements, or integrate them into a coherent cognitive system.

If we are to use the concept of "pluralism" with respect to medical systems, it might be best to confine it to describing *societies* with more than one paradigmatically distinct medical system. Thus, we could refer to India as a medically pluralistic or multisystemic *society*. Giving primacy to the concept of society rather than medical system here has two purposes. First, it prevents our doing damage to the important concept of *system*, with all its implications for paradigmatic consistency, functional interdependence, feedback loops, two-way communication, etc. Second, it reminds us of the fact that societal type (in terms of surpluses, specialization, organization, ethnicity, colonial or industrial development, etc.) lays the basis for a multisystemic medical profile in the first place.

I suggest that we refer to the various medical traditions in India (or China, Mexico, the U.S. or any other society, for that matter) as constituting a plural, pluralistic, or multisystemic medical *configuration*. Such configurations will vary from society to society. The most important aspect of any pluralistic medical configuration is the nature of the relationship between constituent medical systems. Differences of legitimacy, popularity, cultural identity, prestige, familiarity, and cost establish patterns of usage ranging from exclusive (single-system) to partial (multi-system or dual-use). Patient constituencies can also vary immensely (in terms of class, ethnicity, peasant or urban status, etc.), and so too, their views of the different systems. A factor rarely stressed in discussions of "medical pluralism" is the nature of the actual presence and availability of the constituent systems "on the ground" (in a specific locus). Here we may profitably borrow from physical anthropology the useful concepts of *sympatric* and *allopatric* entities. *Sympatric* medical systems or practices (system segments) are co-present in, and/or available to the same community or patient constituency. *Allopatric* systems or practices are not. The question of exactly which aspects of which systems are co-available to which constituencies is basic to the description and analysis of any multisystemic medical configuration.

Given our discussion thus far, the following definition of "medical system" is proposed:

A patterned, interrelated body of values and deliberate practices, governed by a single paradigm of the meaning, identification, prevention, and treatment of sickness.

Such a definition would embrace all medical systems, and allow us to treat each as a paradigmatically consistent construct. "Sickness" is a purposefully all-encompassing term which embraces both "illness" and (or) "disease" concepts.

The requirement that they be based upon a single paradigm in no way implies that medical systems may not exhibit internal complexity. I suggest that we may speak of medical systems as ranging from simple to complex in terms of the variety of paradigmatically and functionally related roles, institutions and techniques they may contain. Western biomedicine is a

*complex medical system* [24]. Its licensing and control boards, its medical schools, hospitals, pharmacies, clinics, offices, drug manufacturing companies, and patent medicines; its vast hierarchy of orderlies, lab technicians, therapists, dieticians, social workers, nurses, general practitioners, specialists and other healing role incumbents all reflect a *single* underlying paradigm of cause, meaning, and treatment of disease [25]. On the other end of a continuum we could speak of *simple medical systems* with no special roles or institutions beyond those derived from sex or family membership. Kung bushman medicine might be such a simple medical system, where all men are relative equals in ability and mandate to cure [26].

#### TYPING VARIANT AND SUB-SYSTEMS

Some of the more difficult problems in the study of medical systems are (a) sub-systemic variation and (b) the nature of intersystem differences in legitimacy.

##### *Folk, Popular, and Professional medicine*

Most scholars view "folk", "popular", and "professional" medicine as coexisting sectors of *complex* societies with dominant regional and/or cosmopolitan medical systems. Kleinman refers to them as the "three social arenas within which sickness is experienced and reacted to" [27]. Indeed, he sees these as basic sectors of "most health care systems".

The differences between these three sectors are anything but clear, and few terms have been as overworked and underdefined.

By and large, "folk" has been used in three different ways:

- (a) as any system other than Western biomedicine;
- (b) as any system other than a written medical system;
- (c) as any system that varies from the official (always written, usually Western biomedical) system in the community or society.

The first usage is limited and ethnocentric—a simple substitution for the word "primitive". It again lumps all non-biomedical systems as "look alikes". The second usage has similar implications yet causes additional problems in also lumping traditions as non-folk which may share little aside from literacy. The third usage implies that the folk system is simpler than the official system it differs from, and most usually sets Western biomedicine up as the model from which other (folk) systems deviate.

I suggest that by standardizing our definition of "folk medicine," we can get much more use out of the concept. "Folk medicine" should be strictly limited to describing *systems or practices of medicine based upon paradigms which differ from those of a dominant medical system of the same community or society*. By this definition, autochthonous medical systems (such as Ayurveda, classical Chinese, Yanomamo, Bushman, or pre-contact Navajo) cannot be labeled "folk". But any ethnic system can, if it is not the dominant practice of the community or society. Neither the presence of professionals, nor lack of differentiable healer roles affects this definition. Professional healers may be folk practitioners if they practice folk medicine [28].

At base, "professional" means craft expertise, and

ability to earn a living at one's craft. At least with respect to modern medicine, however, it has come to mean much more. Freidson [29] views "a profession as an occupation which has assumed a dominant position in a division of labor, so that it gains control over the determination of the substance of its own work" (p. xvii). In Anthropology, as in sociology and economics, we have come to equate "professional medicine" with—and thereby conceptually divorce the lay populace from—control, legitimacy, and orthodoxy of health beliefs and practice (thus Kleinman's reluctance to include professional practitioners of any kind in "folk medicine" [30]). Lay medicine becomes "popular" medicine, or if different enough, "folk". Thus a distinction manifestly based upon *organizational* differences between sectors takes on latent *paradigmatic* significance. Readily obscured by over-attention to the professional/lay role and organizational distinction is the extent to which healing practitioners and lay public—however differently organized—share a common paradigm of health, sickness, and treatment.

Spiro [31] has stressed that an ideology or cognitive system may consist of levels of knowledge, internalization, and behavioral manifestation. Individuals only partially familiar with (and demonstrative of) its contents and prescriptions may nonetheless be considered adherents of the system. Often, lay and practitioner ("professional" or not) responses to disease differ simply because each reflects a different level of expertise and access to technical or medicinal remedies. However, if practitioner and layman agree that what each does in response to illness is *proper and effective even though dissimilar*, and if the response of both reflects a common model of explanation for the practices and outcomes even though these may differ in degree of sophistication, then the lay response is but one level of a patterned hierarchy of responses to illness, one element of a single system. It is not paradigmatically variant. It could not, therefore be "folk". But could it be popular?

We can use the concept of "popular medicine" in two ways. The first closely approximates common usage by labeling as popular *all medical practices performed by other than officially sanctioned professionals of a medical system, and which do not directly contradict the paradigm of the system*. Both lay and professional practices are included as popular. An advantage of this definition is its relative ease of use. Any lay practice can be viewed as popular unless it is folk. We are "simply" required to define the boundary between popular version and folk variant. Of course, this in itself is no mean task.

A second usage would label as "popular" only *those beliefs and practices which, though compatible with the underlying paradigm of a medical system, are materially or behaviorally divergent from official medical practice*. Again, this includes both lay and professional practices. However, this still leaves a large body of lay medical behavior which does *not* diverge materially or behaviorally from official practice. Thus, by this definition, a medical system would be viewed as consisting of two sectors: the *official* and the *popular*, each with lay and professional manifestations (or levels). Such usage allows us to recognize and properly deal with lay medical behavior (particularly self-treatment)



which adheres closely to official professional values, and which is closely controlled by the official medical sector. In the United States, for example, the ingredients, manufacture, symptom-specificity, dosage, and sale of most patent medicines are controlled by processes and personnel which represent (and are licensed by) the official medical sector. Self-treatment with patient medicines for purposes and in a manner intended by the manufacturer and sanctioned by physicians and official agencies is not a "version" of official "professional" medicine, in this sense.

On the other hand, our first (all-inclusive) definition of popular medicine lumps such compliance uncritically with the many instances wherein laymen generalize patent medicine use to treatment of symptoms or of patient types beyond those officially targeted by the medication; or wherein laymen adopt non-specified procedures of administration. Similarly, the definition forces us to lump moderate use of experimentally verified nutrients and vitamins with self-imposed mega-vitamin dosage and out-of-the-ordinary dietary regimens. Both kinds of usage occur at the lay level, and the distinction is significant.

Now, the second definition of popular medicine also has disadvantages. Primary among them is the necessity for identifying *two* boundaries. It requires mechanisms for distinguishing popular medicine from (a) variant folk medicine on one side, and (b) compliant official medicine on the other.

A further refinement should be added to both definitions. We may find much advantage in viewing popular medicine as part of a specific system (of which it is the unofficial sector). No popular practice should be treated as simply "free floating". Even if compatible with the paradigms of several systems, its primary systemic identity should be sought. If there are several "official" medical systems present (as with Unani, Ayurvedic, and biomedicine in India), there will thus be several popular medical complexes as well. Individuals may "mix and match" elements of various systems, but each element is popular with respect to a particular system. One could, of course, speak in general terms of the "popular medical sector" of India, but in discussing a specific usage, one would also have to identify the master system to which it pertained.

Finally, one should note that both definitions of popular medicine use the "official medical sector" (almost always represented by professionals and their organization) as the standard against which we judge, and subsequently label, lay practices. Given present usage, however, there seems no way of getting around this. The question of "who owns the paradigm?"—the lay or official sector?—deserves much more lengthy treatment that can be attempted here.

It goes without saying that in addition to behavior itself, the assignment of any medical act to "official", "popular" or "folk" sectors ultimately depends upon the intent behind the act. In the U.S., herb-use based on assumed vitamin, mineral, or other chemical content, is popular medicine. Herb-use based on assumed intrinsic qualities linking material and disease, independent of chemical qualities, is folk medicine. And it may well be that in both instances, the purveyor of herbs is himself operating in a folk mode. Differences in "explanatory models" [32] may be as common

between folk or popular professional and patient as between physician and patient.

Some U.S. medical usages and intentions reveal strong adherence to the biomedical paradigm and its official proponents. Others reveal subtle dissatisfactions or developing needs and may skirt dangerously close to the limits of the paradigm. Indeed, new concepts and practices often enter medical systems via the popular sector, where the pressures for orthodoxy are weaker, and where peer, kin, ethnic and other local networks constitute the major sources of behavioral reference and anxiety relief. In good part, the current official biomedical interest in nutrition (and its effects upon hyperactivity, cancer, kidney and heart disease, etc.) originated in the popular sector. Biofeedback (for coronary patients) and imaging (for cancer victims) are practices with increasing popular support and antecedents in folk-associated variants such as yoga, TM, and Christian Science.

Popular and folk medical sectors are generally highly adaptable behavioral arenas, at the same time both conservative and eclectic; always pragmatic. "Foreign" or unprecedented elements may operate side by side with obsolete official practices. Particularly because of this latter tendency (although one cannot legitimately view folk and dominant medicine as constituting a single system) there are usually "genetic" affinities between folk and dominant systems which have a long history of co-existence (or, particularly, some common ancestry). McQueen has noted "thematic" consistencies between biomedicine and certain Western folk traditions [33]. Many folk practices in the U.S. and (particularly) Mexico exhibit the humoral characteristics of an earlier official system. Nevertheless, such affinity does not warrant our lumping and treating folk and dominant medicine as a single system.

Note that our definitions of folk and popular medicine are independent of complexity or content, and depend, rather, on *location* or *variance vis à vis* another medical sector or medical system. This allows them to be used anywhere, and with reference to any medical system or practice. For example, most treatments of popular medicine suggest that it is a by-product of modern Western society, or at the very least, of large-scale literate traditions. Thus, Leslie sees India's popular medicine as emerging "with the institutions of mass society—industrial production of medicines, advertising, and the school system" [34]. True as this view may be for India or Europe, the basic definition of popular medicine must not be tied to a specific (state-level) societal type. Such a treatment would leave us conceptually unable to handle medical behavioral variations or official/lay sectorial differences in other, say primitive and peasant, societies. Similarly once we free our definition of "folk" from non-Western or non-biomedical association, we are capable of correctly and most usefully applying the concept to paradigmatic-level variations *vis à vis* any medical system in any society. This definition now allows us to label and approach *Western biomedicine as folk medicine* in many tribal and peasant areas of Africa, Asia and Latin America where it operates in the presence of a locally dominant medical system. The concept of "folk medicine" is merely an heuristic device. When divorced from traditional connotations



of "grass roots", "lay", or "non-Western" origin, and viewed strictly as a dynamic categorization of practices in the presence of a system which has the power of local, societal, or elite-sponsored legitimacy, it offers much utility.

These definitions and usages of folk and popular medicine provide us with conceptual tools for analyzing change within, and interaction between medical systems.

#### *Dominant and variant sympatric systems*

Earlier, I raised the notion of "sympatric" medical systems. At this point it is necessary to emphasize the obvious fact that co-existent medical systems may vary greatly in degree of legitimacy and physical presence. Whole systems may not be available to all areas or population sectors, but rather present only as system-segments which offer limited health concepts and functions. Biomedicine is frequently present only as poorly-staffed immunological and traumatological services in many peasant, primitive, and ghetto urban areas. In addition to type of physical presence, sympatric medical systems may be either *dominant* or *variant*. *Dominance* may derive from several sources, among them traditional prestige or usage, political imposition and legalization ("officialization"), or prestige derived from usage by an elite population sector. India's systems of Yunani, Ayurvedic, and Western biomedicine are co-dominant, with biomedicine's mandate deriving from political official sanction and (to a lesser extent) utilization by a visible elite.

Medical systems which derive dominance through local tradition would seem capable of serving the widest variety of medical and psycho-social needs. Medical systems with more limited bases of dominance (usually elite-derived and legally established) would tend to serve more limited ends. To know the provenience of dominance is to appreciate more fully the patterns of medical usage and the bases for interaction with other systems. Among lower class migrants and residents in Bogota, for example, Western biomedicine is imported, imposed, and closely associated with modernity. It is not uncommon for patients to use it simply for "demonstration (to self and others) of social status . . . or modernity" [35]. Dawson has noted similar usages in Africa, where native mine employees feel obliged to use (biomedical) mine health clinics in order to demonstrate a commitment to the industrial lifestyle. However, workers are under no obligation to "take the same risk with their families", for whom they obtain only the services of the traditionally based local dominant medical system [36]. Both of these are examples of limited dominance bases attracting limited-function utilization.

*Variant* medical systems (or practices) are those which lack dominance *vis à vis* other sympatric systems. For heuristic purposes, variant systems could be treated as folk systems, but again we must ask: "From whose perspective are they variant?" Co-dominant systems may either embrace the same constituency or largely separate ones (different classes or ethnic groups, for example). To the strict adherent of Ayurvedic medicine, biomedicine and Yunani traditions may appear variant and lack the force of legitimacy. Thus, systems which are dominant in one locale or

within one constituency, may be variant in another [37].

Bearing these various definitions and categorizations in mind, examination of a medical configuration such as that of peasant Zinacantan, could produce the following categorization:

(A) *Biomedicine as dominant medicine*, bearing the force and prestige of (outside) national legitimacy, and label of "modernity". It is not present in complete form, but rather enters via selected personnel and material. Limited in function.

(B) *Local Zinacantan medicine as dominant medicine*, with a traditional base. Ultimate legitimation in the hands of prestigious local curers (*hilols*) with the mandate to diagnose, treat and confer sick roles based upon indigenous disease concepts. Basic paradigm and its behavioral concomitants largely present in all levels of Zinacantan society [38].

(C) *Biomedical popular medicine* as lay practices manifestly and/or emicly compatible with the biomedical paradigm (the distinction between user and observer perspectives is critical). Evidenced in local usages of patent medicines, drugs, minor surgical techniques, dietary regimens, etc.

(D) *Zinacantan popular medicine* as locally-derived practices compatible with the locally dominant paradigm (evidenced in home herbal, ritual, dietary, and other usages, plus professional ministrations where these do not represent the acts of "officially" recognized native practitioners).

(E) *Biomedicine as folk medicine* insofar as it is variant and diverges from locally dominant medical practices which bear the force of traditional legitimacy.

(F) *Other practices as folk medicine*, either locally derived or introduced from outside (via huksters, experiences from travel to other communities, etc.), which diverge from locally dominant medicine.

(G) *All locally-derived practices* (both dominant and variant) as *folk medicine vis à vis* the officially recognized biomedical system promulgated by the national government.

Each category offers a perspective for analysing the position of a particular configuration of medical practices within the community. Such categorizations clearly require more critical research from us. We have tended to view (and study) primitive and peasant medical systems as well-integrated, highly standardized bodies of belief and behavior with little or no internal differentiation. The notion that *local* medical systems have *popular* or *folk* variants has been avoided far too long, as (though to a lesser extent) has been the notion that biomedicine may play a dual (dominant/folk) role in milieux with locally dominant systems. To appreciate these factors of paradigmatic identification and dominance/variance is to approach the complex nature of medical resort hierarchies (particularly in changing societies) with greater capacity for insight.

#### TYPES OF MEDICAL SYSTEMS

Unfortunately, agreeing upon a very broad definition of medical system, and knowing how to label, compare, and categorize such systems, are two different matters. The criteria used for categorizations are

still highly ideosyncratic. A number of classification schemes exist, reflecting a variety of perspectives, and a wide range of utility.

#### *Geographic Sphere of Influence*

Dunn [39] distinguished medical systems on the basis of their geographic sphere of influence. He speaks of *local*, *regional* and *cosmopolitan* medical systems. Local systems are geographically restricted and indigenous. Regional systems are also indigenous, with standardized practices extending over a wide geographical area. Ayurveda is a typical "regional" medical system. Cosmopolitan medicine is also standardized, yet is world-wide in distribution. Dunn, Leslie, and others use "cosmopolitan" medicine as an ostensibly non-ethnocentric replacement for "Western", "modern", or "scientific" medicine. However, if cosmopolitan solely denotes international and pan-cultural distribution, then *homeopathy* must also be labeled "cosmopolitan". It is probably practiced in as many countries as Western biomedicine.

Dunn attributes more than geographical scope to his three categories, however. "Local" medical systems are also "folk" systems, characterized by non-elitist, often part-time and minimally specialized curers who are largely self-trained and self-designated. Regional systems exhibit (among other characteristics) more elitist, scholarly and full-time healers who are also generalists and trained within either a master-pupil or more impersonal academic setting [40]. In that their inclusion goes unjustified, such secondary non-geographic attributes (why these and not others?) tend to weaken Dunn's otherwise highly useful typology. Geographical scope alone can be a most significant characteristic in the differentiation of medical systems. It would enable us to speak of "Chinese cosmopolitan medicine" (the common health beliefs and practices of overseas Chinese) as well as "Western cosmopolitan medicine". Indeed, homeopathy, naturism, or spiritualism could be profitably labeled and studied as "cosmopolitan folk medicine".

#### *The healing task list*

Dunn, Kleinman, Chrisman, Rivers, and others have proposed a number of tasks performed by the "full-service" medical system. Comparison of the manner in which these tasks are performed can thus serve as the basis for typologies. Dunn claims that all medical systems span what he calls the "spectrum of health-care delivery" [41]. This includes:

- (a) health education
- (b) public health sanitation and control
- (c) risk assessment for the individual and group
- (d) prevention
- (e) case-finding
- (f) diagnosis
- (g) prognosis
- (h) therapy
- (i) rehabilitation.

Kleinman [42] proposes six "core adaptive tasks" of medical systems:

- (a) the cultural construction of illness,
- (b) the cultural construction of strategies to guide choice of care-practices, healers, etc.,

(c) management of sickness (labeling, classifying, explaining, etc.),

(d) healing activities,

(e) largely preventive health enhancing—both deliberate and non-deliberate,

(f) management of outcomes (definition of cure, explanation of failure, death, and recurrence).

Chrisman [43] speaks of five "conceptual elements of the health seeking process". These include:

(a) symptom definition,

(b) illness-related shifts in role behavior,

(c) lay referral and consultation,

(d) treatment actions,

(e) adherence to treatment advice.

Rivers [44] viewed all medical systems as exhibiting, and thus differing, in:

(a) theories of causation,

(b) diagnosis,

(c) treatments,

(d) prognosis.

Such compilations are useful check-lists for more standardized ethnographic research, and can provide the corpus of data from which typologically relevant elements may be extracted. In themselves, however, such lists involve too many variables for easy classification of systems. The range of cross-cultural variation within each task would have to be established, and the meaningful sub-divisions agreed upon. While any one task could be used for classificatory purposes, the use of all would ostensibly be best for an ultimate typology. Yet here, of course, the difficulties multiply, for it is doubtful whether any two medical systems exhibit quite the same task configurations, and thus the grouping of systems by similarity of task configuration would be difficult, if not impossible. Each healing task may have a plethora of behavioral manifestations. For example, pulsing, laying-on-of-hands, case-histories, confession, possession and trance revelation, iris analysis, chemical analysis, physical examination, and hundreds upon hundreds of divinatory techniques are all diagnostic tasks with world-wide distribution, capable of occurring in numerous combinations. Some systems may exhibit a large number of diagnostic tasks (elsewhere I have described the presence of many of these same techniques among folk curers in Bogota, Colombia [45]).

Landy's distinction between the cultural ("medicine") and social aspects of a medical system [46] may help reduce the burden somewhat by offering a means of conceptually dividing medical tasks into at least two domains. The one includes tasks relating to the values, beliefs, and repertoire of healing behaviors. The other embraces roles and organizations involved in the performance of healing behaviors. Either domain could serve alone as the basis of a classification.

In the long, run, it will probably be more useful (and perhaps less cumbersome) to go beyond the healing task itself and focus instead upon the underlying paradigm, relative significance, or functional outcome of the task or tasks.

#### *Healing task paradigms*

The healing task lists reflect the perspectives of

their authors. Each would lead to a different description of the same medical system. Dunn's is clearly oriented to the duties of the health delivery specialist or organization. Chrisman's "conceptual elements" are just as clearly oriented to the recipients of health care (his is also the only task list to include the construction of sick roles). Kleinman's tasks are largely cognitive structures, and do not reflect the functions of any particular constituency.

Dunn suggests that one way of using a task list for classifications is to focus on the relative weight (importance) which different medical systems assign to the various tasks [48]. Though Dunn does not pursue his suggestion, such a classification could lead to categories such as "etiologically oriented" systems, "cure" systems, "diagnostic" systems, etc. Each type of orientation, furthermore, would reflect underlying paradigmatic statements, as well as relative level of somatic therapeutic effectiveness of the system.

Kleinman focusses his attention on the *explanatory model* (EM) underlying each of the healing tasks. Each medical system ostensibly displays a particular configuration of healing task EMs, and comparison of these could lead to the creation of typologies.

But how to compare explanatory models? One could focus upon single healing tasks or search for manageable basic patterns underlying all tasks in a given system.

George Foster [49] has attempted a classification based upon what he believes to be the underlying conceptual orientations of one healing task—causal explanation. Foster dichotomizes medical systems on the basis of their etiologies. *Personalistic* etiologies and medical systems are those which give to all misfortune, including disease, a single causal explanation involving the active, purposeful intervention of some human or supernatural agent. *Naturalistic* etiologies (systems) attribute the cause of disease to sources separate from those which cause other misfortunes. Disease is here the result of impersonal, non-purposeful natural conditions. Above all, suggests Foster, naturalistic systems "conform to an equilibrium model" of disease [50]. Humoral medicine is a prime example.

Foster makes no claim to mutual exclusivity of the two etiologies, suggesting that some systems may contain aspects of both. Ostensibly, all non-Western medical systems could be placed along a continuum from wholly naturalistic to wholly personalistic causal models. However, *why* a system would rely more heavily upon one rather the other is left unexplained. Furthermore, this model does not distinguish between emic and etic (or patients vs healer) perceptions of etiology [51]. Even more important, Foster leaves Western biomedicine out of his discussion altogether, and fails to explain why he treats it as a special case, incapable of being contrasted directly with all other medical systems. At best he suggests that all other systems are of a different order—much simpler—than Western biomedicine. Paralleling Sigerist's earlier comment, Foster and Anderson are "struck by how few cognitive frameworks among non-Western peoples are necessary to 'explain' the presence of disease" [52]. The etiological "dual division is sufficient to distinguish major categories, or systems" of indigenous medicine [*Ibid*].

Fabrega has made an attempt to integrate all heal-

ing tasks (or at least his version of them) into an overall classification based on the underlying paradigm which controls all facets of a medical system. He dichotomizes medical systems into the *personal* and *impersonal*. The impersonal is Western biomedicine. The personal model is a generalization from Zinacantan (Chiapas, Mexico) medicine which Fabrega (along with Silver) suggests may serve "as a paradigm of how certain simple folk societies are oriented to disease . . ." [53, p. 218]. Fabrega focuses upon five aspects or tasks supposedly common to all medical systems: (1) Concepts of the relationship between body and self, (2) conceptualizations (including etiology) of disease and health; (3) the character of the health care system (aims, healer style, etc.); (4) the curer-client relationship (including healing situation, interaction patterns, etc.); and (5) tools, symbols, and setting of cure [54, pp. 250-253].

By and large, Fabrega's scheme hinges on paradigmatic concepts of the relationship between man's body and the world around him. This paradigm, he suggests, is manifest in all healing tasks. Disease and illness are either narrow and body-focussed (impersonal paradigm) or a reflection of disequilibrium in broader systemic and behavioral functions (personal paradigm). Disease and healing (including healer roles) are either isolated from other roles and events (impersonal) or part of wider systems such as self, family, social relations, the environment, and the cosmos (personal).

Unfortunately, Fabrega's dichotomy does little but distinguish Western biomedicine from all other systems. Admittedly, this is of utility in predicting, locating, and analyzing the specific kinds of conflict which accompany the impact of biomedicine upon indigenous systems. At the same time, all indigenous systems "look alike". Fabrega nonetheless offers a promising direction for classification which takes into account both healing task configurations and their underlying paradigms. Implicitly, he further directs our attention to the broader social structures and world views which shape these paradigms.

#### *Social Structure*

Several interesting attempts have been made to explicitly link medical systems with the social structural contexts in which they operate.

Glick suggests that medical systems reflect the sources of power in a society. The nature of these power sources, and how they are revealed in the explanation and treatment of illness constitute the essence of each medical system. "A diagnosis," he claims, "involves the ideas about sources of disease-causing power, and treatment involves attempts to overcome that power" [55]. Power may derive from religious, economic, political or other institutional sectors. In each instance, the cognitive framework of the institution governs the conceptualization and legitimization of illness, and in the process of allaying the anxiety which accompanies disease, the power base itself (and its methods of wielding power—whether through science, ritual, kinship, etc.) is further legitimized and reified.

Glick's proposal is attractive. It could serve as an essentially up-dated method of identifying and understanding the pervasiveness of a *cultural focus* [56].



However, while a particular institution or focus may be dominant in a culture, we must remember that it is not the only one present, nor does it necessarily control all others. All institutions in a society tend to share and exhibit a measure of thematic and conceptual consistency.

Unschuld takes another view of institutional power. He proposes distinguishing medical systems on the basis of the locus and nature of controls over health resources. The process of wresting this control away from family and lay competence Unschuld calls "professionalization". He sees "professionalization" as a function of societal type—specifically, the level of organizational complexity. He believes that

"... with the cultural development of any community or, later, society, we observe a continuous shift of control over resources from the individual family to the community and then to outside groups and organizations. Since medicine is to be seen as an integral part of any culture, it follows cultural development commensurately as any other integral part does. Therefore, in the field of medicine, we recognize a similar shift of control over resources from within the family to outside the family" [57].

Looking from hunting-gathering society through simple agriculture, herding, pre-industrial urban, and finally industrial city society, Unschuld sees a continuum of decreasing public and family control, and increasing professional and bureaucratic monopoly of health care and sick-role legitimization. Unschuld's scheme could possibly result in a medical system classification roughly paralleling Steward's levels of sociocultural integration, or paraphrasing (in medical organizational terms) Wallace's religious organizational typology.

#### World view

The relationship between medical systems and world view would seem to be a natural element on which to base a classification. "Every culture," states Pelligrino, "has developed a system of medicine which bears an indissoluble and reciprocal relationship to the prevailing world view" [56]. Almost four decades ago, Ackerknecht declared that medical systems and practices must reflect culture "patterns", and that in all societies they were consistent with ideas and behaviors of everyday life [59]. Field reiterates much the same view today in suggesting that medical systems are but portions of a society's repertoire of "defense mechanisms". "The health system thus takes its place alongside other strategic 'mechanisms' of the social system, for example socialization, institutionalization, pattern maintenance and the control of deviance" [60]. Whiting and Child certainly believed this when they proclaimed medical systems (particularly their etiologic aspects) to be projective devices *par excellence*, and used them as clues to the nature of basic personality, and ultimately, of the pattern-creating effects of socialization [6]. Kunstader recognizes this projective capacity, noting that among other things "medical systems have often been an important focus of 'nationalism', revivalism or millenarianism..." [62]. The American Indian Ghost Dance is an example. Kunstader has called for more comparative studies of the ideological bases of medical systems.

Unfortunately, few scholars have focussed upon paradigms and themes which underlie whole medical systems and their panoply of healing tasks. Fabrega's dichotomy is one such attempt. Jones' [63] is another. Jones explicitly deals with world view, and has recently offered a bold dichotomy of paradigms that he feels reflects the difference between Western and Asian world view and medical systems. The *naturwissenschaft* (N)-tending paradigm of the West differs from the *geisteswissenschaft* (G)-tending paradigm of Asia in its differential manifestation of four key "world view indices". These are:

- (a) static versus dynamic,
- (b) continuity versus discreteness,
- (c) abstract versus concrete,
- (d) immediacy versus mediation.

Jones sees traditional Chinese world view as tending toward the G-paradigm—concreteness, continuity, immediacy, and dynamic bias. Thus, (as but a partial example of his full argument) the immediacy/mediation index expresses the difference between tendencies toward direct participation of individuals in one another's lives (China) versus distance or objectivity (the West). Abstract/concrete reflects, among other things, the difference between incumbents having to fit their roles (West), versus roles shifting to fit the incumbent (China). In medical terms, world view is ostensibly reflected in (among other things) the more personal involvement by Asian healers with their patients, and the greater latitude they have in creating their roles and adapting healing practices to the specific time, place, and patient. G-tending medical systems would also be more likely to accept change and contradiction, and to tolerate the coexistence of "different kinds of medical practice" [64].

Jones' is a commendable attempt to derive medical systems from societal contexts (in this case, world view). The problem lies with the selection of factors that ostensibly represent world view. They are etically (and clearly subjectively) assigned, and it is doubtful whether any two scholars would agree on the basic world views of Asia or the West [65]. Jones' indices are also clearly based upon polar contrasts with a primary model of Western values and social structure. Thus, it is not surprising that most non-Western societies should exhibit his proposed G-tendencies. For this very reason, it complements Fabrega's personal-impersonal dichotomy and may be of some utility in describing and analyzing the interaction between biomedical and traditional health systems. Most of the dichotomies discussed herein are fair reflections of the downright unique nature of Western industrial society and its scientific, industrial medicine. However, like most other dichotomies, Jones' is incapable of adequately distinguishing non-Western medical systems from one another.

McQueen combines concerns for world view and social structure in proposing the use of *themes* as a basis for comparing medical systems [66]. Themes, of course, are ostensibly limitless in number, and McQueen does not provide us with guidelines for their selection. However, in an examination of U.S. health practices (including biomedicine and folk medicine) he claims to see common themes of (a) healing as individual rather than group or community



focussed; (b) body as machine; (c) single, simple source of disease and cure; and (d) health and disease as discontinuous from everyday life. Implicitly McQueen is suggesting that U.S. health and healing reflect broad societal concepts of self, body, and community. However, we are not told whether self-body-community themes (however manifest) are equally critical to the medical systems of other societies, or whether such themes are capable of producing classifications more flexible than, say, Fabrega's essentially us-them dichotomy.

#### *Medical type and societal type*

At base, medical systems and world views are dependent variables, a product of their ecological and societal contexts. It stands to reason, therefore, that a fruitful method for classification of medical systems would naturally derive from the simple classification of societal types or ecosystems. Unfortunately, this relationship is not easy to discern. Certainly, one can agree with Unschuld's proposal that medical "professionalization" (as he defines it—increased medical control by non-familial entities) would tend to vary directly with societal size and complexity. "Tendencies", however, are not universals. For example, it is logical to assume that medical systems of peasant societies will differ from those of tribesmen or hunters in ways analogous to the differences between these societal types themselves. Unfortunately, differences are not so clear-cut. While hunters and gatherers such as the Bushman may have no specialized healing roles [67], Australian aborigines do (albeit part-time). So, too, do tribesmen and peasants. Peasant villages may have but a single curer or a number of specialized practitioners [68–70]. The presence of healing organizations distinct from the family would seem to be a function of more complex societal type, but is certainly not limited to urban states. North American Indian medicine societies, the Zar cult of the Ethiopian Amhara [71] and even the participation of Guatemalan village political leaders in cures [72] attest to the presence of non-kin-based health organizations in both tribal and peasant societies.

The distribution, too, of etiological concepts is not clear-cut. Sorcery attributes are found in all societal types, including urban/industrializing (cf. Lieban [73]; Press [74]; Mitchell [75]). While it might be the case that intra-community sorcery attribution is more common in larger than in smaller-scale communities (a matter of minimizing tensions in small groups), there is no clear-cut pattern [76]. Similarly, the projection of disease causality upon the supernatural (spirits, ancestors, ghosts, gods) is common to societies of all types, with ancestral attribution more common in, though not exclusive to, strongly kin-based societies. While a broad typology based upon human versus supernatural causality of disease might be possible and even useful for certain purposes, such a dichotomy would not emerge from any simple differentiation of societal types.

This is not to say that medical systems are largely phenomena *sui generis*. Etiological concepts are certainly broadly based upon social structure and world view. In technologically simple (compared with industrial) particularistic societies, man's relation with nature and with other men are *de facto* more intimate

and illness tends not to be viewed as discontinuous with community, environment, cosmos and interpersonal relationships. Most non-Industrial societies reflect this, and indeed, recognition of such a broad relationship is the strong suite of most of the typological dichotomies discussed previously. Similarly, degree of potential (if not actual) diversity and complexity of healing personnel and groups is obviously related to the productive and organizational level of the society. However, quite *beyond* the broad factors of surplus and technological/social complexity, medical systems are also reflections of needs, anxieties, and stresses generated by the interaction of an array of highly ideosyncratic environmental, social, and economic phenomena. An important goal of future classification attempts will be the sorting out of ideosyncratic from the more generalizable determinants of medical configurations.

#### *Medical systems as adaptive systems*

The study of the adaptive characteristics of medical systems would seem to be a potentially fruitful area for determining the genesis of, and ultimately comparing, medical systems. But what constitutes adaptation?

One view suggests that the adaptive function of a medical system derives from its capacity to cure or mitigate the somatic effects of disease. Adaptive efficacy would be reflected in mortality rates, man-hours of invalidity, and level of work-efficiency (a reasonable indicator, yet probably impossible to measure cross culturally). To Alland, the best measure of adaptive efficacy appears to be differential fertility [77, p. 4]. Thus, the comparative adaptive efficacy of medical systems would, at base, involve head-counting. Fertility may not be a good measure of medical system adaptiveness, however. As Dubos [78] and others (including Alland) have warned, population and fertility levels in many societies (most particularly the industrializing West) have jumped or fallen quite independent of medical development.

Medical systems undoubtedly reflect the disease-base of the society. Yet, such a typology would be difficult to derive. Disease-base is a function of ecotype, local disease vectors, population size, housing and sanitary customs, nutrition, outside contacts, and many other factors. Furthermore, the fact that so many medical systems lack the *mechanical* ability to effectively prevent, mitigate, or cure disease [79], precludes our speaking broadly of "parasitosis-based medical systems" as opposed to "infectious disease-based systems". Most systems direct the bulk of their energy to the amelioration of psychosocial stress generated by disease.

Dunn echoes many in suggesting that medical systems fill two kinds of needs—biological and psychosocial. The overall "adaptive efficacy" of a medical system would be the extent to which it fills both needs, plus its capacity to change to meet new threats and needs [80]. Of course, the psychosocial functions of medical systems go far beyond the management of sickness-generated anxiety. In a number of societies, concepts and practices relating to illness and its cure help individuals adapt to an array of socially-generated stresses. Medical systems, furthermore, may contribute to other institutions with adaptive functions of

significance to the society as a whole. To identify these adaptive functions, we could use something like Aberle *et al.*'s classic listing of the "Functional Prerequisites of a Society" [81]—functions which all societies must perform if they are to survive. These include "provision for adequate relationship to the environment and for sexual recruitment", "role differentiation and role assignment", "the effective control of disruptive forms of behavior", "socialization", and other functions. With such a base list (which should be modified, of course, to reflect both ethnographic and theoretical developments in the past thirty years) we could then ask how medical beliefs and practices affect (and thus adaptively contribute to) each of the essential functions of any society. Comparisons and classifications could then be made on the basis of the number and type of essential societal functions affected by each medical system. In one sense, it would reflect the degree of functional interdependence of the medical system (i.e. through one or more of its healing tasks) with other institutions of a society (that is, "societal tasks")—in itself a potentially useful classificatory device.

#### *A Summary of Available Typological Bases*

Some of the classificatory schemes discussed are within our immediate competence. Others need more thought and debate. By and large, the following characteristics of medical systems are readily determinable and thus available for the construction of system typologies:

- (1) Geographical extent and locus of the system. Local, regional, cosmopolitan. If geographically (and cross-nationally) extended, is it used by various constituencies or by a single "proprietary" ethnic group that maintains exclusive use of it?
- (2) Internal structural complexity of the system. Roles, organizations, specialties, etc.
- (3) Kind and degree of elaboration of healing tasks of the medical system. Relative dominance of one or several of the tasks.
- (4) Types of functions offered by the system (somatic, psychiatric, social control, etc. See Press, 1978 for a discussion of some of these functions under rural and urban conditions [87]). Identity of the specific healing tasks which perform these. Number and identity of other social institutions served by (and serving) the medical system.
- (5) Presence or absence of a multisystemic configuration.
- (6) If multisystemic: allopatric or sympatric status of the system(s). Dominant, co-dominant, or variant status. Nature and origin of the dominance or variance. Full or partial-system representation, and nature of the community or population segment served (distribution pattern of the system). If partial representation, identity of the healing tasks present, and how used.

These (others can undoubtedly be suggested) represent a mixed bag of characteristics capable of generating a number of distinctly based classifications. For that matter, of course, there is no single "best" typology of medical systems. Each typology reflects a different heuristic need. In the future, this need (the typological goal) must be made explicit, and type-

generating criteria justified whenever the typology is used. Indeed, this act alone would significantly propel the study of medical systems forward.

At any rate, once past this list of more or less readily determinable characteristics, we're on less firm ground. Currently available thematic, world view, and paradigmatic typologies are highly subjective, largely based upon contrasts with Western biomedicine, and incapable of adequately distinguishing between other types of systems. Adequate guidelines for identifying typologically significant themes, views or paradigms in a variety of cultures are still lacking. Furthermore, the relationship between medical system types and societal or culture types is still unclear. Nonetheless, we will have to deal with these conceptual and relational characteristics if we are to go beyond the mechanical, geographical, and structural bases of medical systems. Ultimately, we must aim for an appreciation of the range of functions which medical systems can fill, and of the manner in which medical systems are derived from generalizable societal, cognitive, and adaptive processes. Here, the continuing search for societal dependencies and paradigmatic models (including themes and world views) is essential. The healing task concept might prove to be an excellent entre to the development of such models.

#### CONCLUSIONS

The study of medical systems has itself been anything but systematic. There has been little agreement on definition of terms, foci of investigation, and bases of system differentiation. I have proposed some clarifications, but it is obvious that we will ultimately have to cease offering such individual definitions and conceptual preferences, and aim toward the achievement of consensus. Now, the definitions and clarifications offered herein are anything but complete. Many exceptions and extensions can be found. Their purpose is primarily to stimulate a more critical treatment of terms and concepts which are too basic to our research and construction of explanatory models to abandon to the uncritical control of "common usage". My goal has not been to discourage the use of existing concepts and classifications, but rather to stimulate an awareness of both their weaknesses and potentials for the evolving science of medical systems.

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#### REFERENCES

1. Leslie C. Introduction. *Soc. Sci. Med.* 12, 65, 1978.
2. Rivers W. H. R. *Medicine, Magic, and Religion*. Harcourt & Brace, New York, 1924.
3. Mitchell W. E. Changing Others: An anthropological study of therapeutic systems. *Man* 8, 17, 1977.
4. Crozier R. Traditional medicine as a basis for Chinese medical practice. In *Medicine and Public Health in the People's Republic of China*. Fogarty International Center, NIH, Bethesda, MD, 1975.

5. Hughes C. C. Medical care: Ethnomedicine. In *International Encyclopedia of the Social Sciences* (Edited by Sills D.), p. 87. The Free Press, New York, 1968.
6. Chrisman N. J. The health seeking process: an approach to the natural history of illness. *Cult. Med. Psychiat.* **1**, 360, 1977.
7. See Kleinman A. and Mendelsohn E. Systems of medical knowledge: a comparative approach. *J. Med. Philos.* **3**, 327, 1978.
8. Ackerknecht E. H. Natural diseases and rational treatment in primitive medicine. *Bull. Hist. Med.* **19**, 467, 1946.
9. Sigerist H. E. *A History of Medicine*, Vol. I, *Primitive and Archaic Medicine*. Oxford Univ. Press, New York, 1951.
10. Glick L. B. Medicine as an ethnographic category: the Gimi of the New Guinea Highlands. *Ethnology* **6**, 32, 1967.
11. Glick, 1967 *Ibid.*, p. 35.
12. Dunn F. L. Traditional Asian medicine and cosmopolitan medicine as adaptive systems. In *Asian Medical Systems* (Edited by Leslie C.), p. 141. Univ. California Press, Berkeley, 1977.
13. Field M. G. The modern medical system: the Soviet variant. In *Asian Medical Systems* (Edited by Leslie C.), p. 82. Univ. California Press, Berkeley, 1977.
14. Leslie C. The ambiguities of medical revivalism in modern India. In *Asian Medical Systems* (Edited by Leslie C.), p. 357. Univ. California Press, Berkeley, 1977.
15. Montgomery views India's various medical traditions as separate systems, arguing that each system manifests "different organizational and ecological features". Montgomery E. Systems and the medical practitioners of a Tamil town. In *Asian Medical Systems* (Edited by Leslie C.), p. 272. Univ. California Press, Berkeley, 1977.
16. See Foster G. and Anderson B. *Medical Anthropology*. Wiley, New York, 1978.
17. Kleinman A. Toward a comparative study of medical systems: an integrated approach to the study of the relationship of medicine and culture. *Sci. Med. Man* **1**, 62, 1973.
18. *Ibid.*
19. See Mitchell J. C. The concept and use of social network. In *Social Networks in Urban Situations* (Edited by Mitchell J. C.), pp. 1-50. Manchester Univ. Press, Manchester, 1969.
20. Press I. Urban illness: physicians, curers and dual use in Bogota. *J. Hlth soc. Behav.* **10**, 209, 1969.
21. Schwartz Lola R. The hierarchy of resort in curative practices: the Admiralty Islands Melanesia. *J. Hlth soc. Behav.* **10**, 201, 1969.
22. Garrison V. Doctor, espiritista, or psychiatrist?: health-seeking behavior in a Puerto Rican neighborhood of New York City. *Med. Anthropol.* **1**, 65, 1977.
23. I have spoken with many physicians in Latin America who tell of the various "folk" explanations they "have to give" their patients "in order to make them comply with the required regimen". These "confessions" by physicians are almost invariably made apologetically, and clearly reflect the physicians' belief that folk and biomedicine do not constitute a single system, even if used simultaneously.
24. Ann Cobb suggests we use the term "plural system" to describe a diversified yet paradigmatically consistent medicine such as ours, and "pluralistic system" with reference to multiple-system, multiple-paradigm complexes such as India's (Medical pluralism: some theoretical considerations. Paper presented at the *American Anthropological Association* meetings, Los Angeles, 1978). Her conceptual distinction reflects my own division, though I believe the terms "plural" and "pluralistic" system should be replaced with "complex system" and "pluralistic configuration".
25. Some readers of an earlier draft of this paper have suggested that ours is not really a single-paradigm system, particularly as reflected in the conflict between physicians specializing in medical and surgical therapy. This is not the place to examine Western biomedicine's paradigmatic consistency. I would argue, however, that there is no inconsistency. All physicians, for example, would agree that surgery and chemotherapy are both solidly based in the Western biomedical paradigm. Conflict arises from views of *priority* and *order* of therapy in *specific* cases. In many instances, both types of specialist are in full agreement as to the proper order or combination of treatment. Similarly, the co-existence of sweating, herbal therapy, and ritual treatment in no way implies paradigmatic inconsistency in a Meso American peasant village. The three may simply represent different steps in a single hierarchy of resort. See Nash J. The logic of behavior: curing in a Maya Indian town. *Hum. Org.* **26**, 132, 1967.
26. Lee R. Trance cure of the !Kung Bushmen. *Nat. Hist. Mag.* **76**, 30, 1967.
27. Kleinman A. Concepts and a model for the comparison of medical systems as cultural systems. *Soc. Sci. Med.* **12**, 86, 1978.
28. Kleinman refuses to label professional healers as "folk practitioners", claiming that folk medicine is strictly a lay phenomenon. Kleinman, 1978 *op. cit.* p. 86. Such a view raises questions of what to label the professional *curandero* who treats *susto*, evil eye, and other complaints, and upon whom a patient constituency is dependent for identification, validation, and cure of "folk" illness.
29. Freidson E. *The Profession of Medicine*. Dodd, Mead, New York, 1971.
30. Kleinman, 1978, *op. cit.*, p. 86.
31. Spiro M. E. Buddhism and economic action in Burma. *Am. Anthropol.* **68**, 1163, 1966.
32. Kleinman, 1978, *op. cit.*, p. 98.
33. McQueen D. V. The history of science and medicine as theoretical sources for the comparative study of contemporary medical systems. *Soc. Sci. Med.* **12**, 1978.
34. Leslie C. The modernization of Asian medical systems. In *Rethinking Modernization: Anthropological Perspectives* (Edited by Poggie J. J. and Lynch R.), p. 93. Greenwood Press, Westport, 1974.
35. Press, 1969, *op. cit.*, p. 216.
36. Dawson J. Urbanization and mental health in a West African community. In *Magic, Faith and Healing* (Edited by Kiev A.), p. 325. The Free Press, Glencoe, 1964.
37. Kunststadter makes much the same point in discussing the confusing attempts to describe and label the many sympatric medical systems in Southeast Asia. Kunststadter P. The comparative anthropological study of medical systems in society. In *Medicine in Chinese Cultures* (Edited by Kleinman A. et al.), p. 693. Fogarty International Center, Bethesda, MD, 1975.
38. Fabrega H. Jr. Some Features of Zinacantan medical knowledge. *Ethnology* **9**, 25, 1971.
39. Dunn, *op. cit.*, p. 135.
40. Dunn, *op. cit.*, pp. 138-140.
41. Dunn, *op. cit.*, p. 137.
42. Kleinman, 1978 *op. cit.*, p. 87.
43. Chrisman, *op. cit.*
44. Rivers, *op. cit.*, p. 6.
45. Press I. The urban curandero. *Am. Anthropol.* **73**, 741, 1971.
46. Landy D. Medical systems in transcultural perspective. In *Culture, Disease, and Healing* (Edited by Landy D.), p. 131. Macmillan, New York, 1977.

47. I am indebted to Virginia Guess (personal communication) for bringing the cultural/social elements of Landy's definition to my attention.
48. Dunn, *op. cit.*, p. 144.
49. Foster G. Disease etiologies in nonwestern medical systems. *Am. Anthropol.* **78**, 773, 1976.
50. *Ibid.*, 775.
51. Foulks E. F. Comment on Foster's disease etiologies in non-western medical systems. *Am. Anthropol.* **80**, 660, 1978. Kleinman A. What kind of model for anthropology of medical systems? *Am. Anthropol.* **80**, 661, 1978.
52. Foster and Anderson, *op. cit.*
53. Fabrega H. Jr and Silver D. *Illness and Shamanistic Curing in Zinacantan: An Ethnomedical Analysis*. Stanford Univ. Press, Stanford, 1973.
54. Fabrega H. Jr. *Disease and Social Behavior*. The M.I.T. Press, Cambridge, 1974. Many of the elements in Fabrega's dichotomy appeared a year earlier in Fabrega and Silver (*Ibid.*, pp. 218-223). However, the personal/impersonal categorizations, and the breakdown by tasks appear to be Fabrega's.
55. Glick, *op. cit.*, p. 34.
56. See Herskovits M. J. The processes of cultural change. In *The Science of Man in the World Crisis* (Edited by Linton R.), pp. 164-165. Columbia Univ. Press, New York, 1945.
57. Unschuld P. U. Medico-cultural conflicts in Asian settings: an explanatory theory. *Soc. Sci. Med.* **9**, 306, 1975.
58. Pelligrino E. D. Medicine, history and the idea of man. In *Medicine and Society* (Edited by Clausen J. A. and Straus R.), p. 10. *Annls Am. Acad. polit. soc. Sci.* **346**, 9, 1963.
59. Ackerknecht E. H. Primitive medicine and culture pattern. *Bull. Histo. Med.* **12**, 545, 1942.
60. Field M. G. Comparative sociological perspectives on health systems: notes on a conceptual approach. In *Medicine in Chinese Cultures* (Edited by Kleinman A. et al.), p. 571. Fogarty International Center, Bethesda, MD, 1975.
61. Whiting J. W. M. and Child I. L. *Child Training and Personality*. Yale, New Haven, 1953.
62. Kunstadter, *op. cit.*, p. 690.
63. Jones W. T. World views and Asian medical systems: some suggestions for further study. In *Asian Medical Systems* (Edited by Leslie C.), pp. 383-404. Univ. California Press, Berkeley, 1977.
64. *Ibid.*, p. 399.
65. Kleinman, for example, believes Jones to be quite mistaken in his assessment of Chinese world view as concrete rather than abstract (personal communication).
66. McQueen, *op. cit.*
67. Lee, *op. cit.*
68. Beals A. R. Strategies of resort to curers in south India. In *Asian Medical Systems* (Edited by Leslie C.), pp. 184-200. Univ. California Press, Berkeley, 1977.
69. Geertz C. *The Religion of Java*. The Free Press, New York, 1960.
70. Nurge E. Etiology of illness in Guinhangdan. *Am. Anthropol.* **60**, 1158, 1958.
71. Messing S. Group therapy and social status in the Zar cult of Ethiopia. In *Culture and Mental Health* (Edited by Opler M. K.), pp. 319-332. Macmillan, New York, 1958.
72. Gillin J. P. Magical Fright. *Psychiatry* **11**, 387-400, 1948.
73. Lieban R. W. *Cebuano Sorcery*. University of California Press, Berkeley, 1967.
74. Press, 1969 *op. cit.*
75. Mitchell J. C. The meaning in misfortune for urban Africans. In *African Systems of Thought* (Edited by Fortes M. and Dieterlin G.), pp. 192-202. Oxford Univ. Press, London, 1965.
76. Whiting, and Adams and Rubel suggest that sorcery is more likely to operate in contexts with minimal formal extra-familial controls. Such contexts cross-cut a number of societal types, and include urban migrant enclaves. Whiting B. B. *Paiute Sorcery*. Viking Fund Publications in Anthropology No. 15, 1959. Adams R. N. and Rubel A. J. Sickness and social relations. In *Handbook of Middle American Indians*, Vol. 6 (Edited by Nash M.), pp. 333-356. Univ. Texas Press, Austin, 1967.
77. Alland A. *Adaptation in Cultural Evolution: An Approach to Medical Anthropology*. Columbia Univ. Press, New York, 1970.
78. Dubos R. *Man Adapting*. Yale Univ. Press, New Haven, 1965.
79. Alland (*op. cit.*, pp. 186-187), for example, sees little somatic efficacy in primitive medicine, and no "connection between [primitive] medical theory and good health practices".
80. Dunn, *op. cit.*, pp. 143, 144. Dunn applies his idea to intra-rather than inter-societal comparison. He suggests that by noting which healing tasks (or needs—either biological or psychosocial) each of several sympatric medical systems effectively manages, we will gain some idea of their relative adaptive efficacy (pp. 144-145).
81. Aberle D. F. et al. The functional prerequisites of a society. *Ethics* **60**, 100, 1950.
82. Press I. Urban folk medicine: a functional overview. *Am. Anthropol.* **80**, 71, 1978.



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## THE PROPHYLACTIC EFFECT OF RELIGION ON BLOOD PRESSURE LEVELS AMONG A SAMPLE OF IMMIGRANTS

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**Abstract**—The twin processes of immigration and assimilation are life changes perhaps more total in scope than any other. Viewing these processes within the general context of stress theory, it is hypothesized that those experiencing the most difficulty resolving the anomic experience of assimilation will evidence higher blood pressure levels than those who are able to make a smoother transition. It was also hypothesized that a smoother adjustment is made possible for the immigrant who has a religious outlook on life. Our data do seem to support the contention that such an outlook is an important stress-reducing device.

There have been numerous social epidemiological studies connecting life changes to various cardiovascular problems [1-3]. A number of investigators have suggested an increased risk of cardiovascular disease among those entering new social milieux [4-6]. However, a perusal of the sociological, epidemiological, and health-related literature revealed only one study dealing with immigration and coronary heart disease [7]. Cruz-Coke and his colleagues compared a group of Easter Islanders who had immigrated to Chile with a genotypically matched group of Islanders who remained behind. They found that elevated blood pressure was "directly influenced by migration, regardless of age". Given the great interest in the relationship between heart disease and life changes, the paucity of studies concerning immigration is surprising, since immigration is a life change that is perhaps more total in scope than any other.

The twin processes of immigration and assimilation are viewed within the context of Selye's [8] theory of environmentally induced stress. Succinctly stated, this theory maintains that exposure to any stressor (such as a life change with emotional content) causes the adrenal cortex to respond with increased secretion of adrenaline and noradrenaline. The increase of lipids in the bloodstream prepares the body for vigorous action ("fight or flight"). Since such active responses are rarely tenable in modern society—we are more likely to "sit and seethe"—the unconsumed lipids accumulate in the arteries. In time, this accumulation leads to the hardening of the arteries and subsequent cardiovascular problems.

This paper seeks to explore the possible influence of the process of assimilation on blood pressure variation among a non-probability sample of immigrants residing in Toledo, Ohio. Two intervening variables of theoretical importance will be introduced in the elaboration of the basic blood pressure/assimilation relationship. Since moving from one normative context to another induces varying degrees of normative conflict and confusion, we shall examine the effect of anomie on the relationship. Additionally, since many authors [9-11] have stressed the therapeutic value of religion, we will attempt to ascertain the role of re-

ligion in the success or failure of assimilation through its assumed role as an attenuator of anomic feelings.

### ASSIMILATION

Assimilation is a process in the course of which the immigrant comes to think, feel, act, and believe in a way not significantly different than a native member of the host society, feels accepted by host nationals, and considers himself to be a loyal national of that society. This process is not unproblematic. Fairchild [12] has stated: "The foreigner has to be 'denationalized' and 'renationalized' at the same time. And let no one imagine for a moment that this is a bland and placid experience! It involves an upheaval of the very depths of emotional personality."

Health, according to Coddington [2] "depends on the organism's capacity to maintain some sort of equilibrium between his internal milieu and the external environment. Resistance to disease depends on the ability to adjust to changes in the external environment." It is reasonable to assume that the immigrant will be in a state of disequilibrium on many occasions, for the norms and values he has brought with him will often not mesh well enough for smooth operation in the new milieu. Since we obtain our conceptions of who or what we are through social participation, the immigrant must undergo a fundamental reassessment of his very being in terms of a new set of criteria. The morbidity inducing effects of such a mental metamorphosis have been enumerated by many students of assimilation [13-15]. The stress of assimilation is, however, differentially experienced. Certain other variables contribute to the attenuation or exacerbation of the severity of the process.

### ANOMIE

Although anomie has been traditionally conceptualized as a property of societies, it has also been usefully applied as a characteristic of individuals experiencing feelings of normative uncertainty and of uprootedness [16-18]. Nisbet [19] saw anomie as "behavior characterized by tensions and distresses

that arise from the efforts of individuals to meet the obligations of two or more irreconcilable norms". Moss [20] has linked anomie with stress and illness, viewing anomie as the lack of accurate and effective information for normal participation in a given milieu. This cognitive disorientation, feeling of apatness, and normative confusion, is inherent in the assimilation process.

### RELIGION

It is our assumption that a religious outlook on life is a valuable resource for the immigrant in his collision with his new world and its alien culture. Jung [11] has stated that all of his patients over 35 years of age had fallen ill because they did not have a religious outlook on life. Jung's doubtless exaggeration notwithstanding, it is suggested that religion has a certain prophylactic power, especially for the immigrant. That it is a vehicle for the inculcation of prevailing secular norms is evidenced by Finney's statement: "Immediately upon engaging in religious group ritual, one begins to learn about the organization with which one has become involved—its belief system, other behaviors (public and private) expected of the religious person" [21]. We may view the religious immigrant, then, as slipping into the traffic patterns that define the quality of American life via the guiding hand of his Church. That the immigrant tends to assimilate the American secular experience by participation in American ritual is made even more evident in the work of Christenson and Wimberly:

Civil religion draws upon civil events such as the 4th of July, documents such as the U.S. Constitution, personages such as Jefferson and Lincoln, and common religious beliefs such as the belief in God. Some basic tenets of civil religion are the belief that the United States is God's chosen nation; the perception of Divine sanctions and inherent morality of civil laws; and the ascription of sacred connotations to such secular symbols as flags, presidential inaugurations, and national holidays.... Civil religious beliefs have been found among most Christian denominations [22].

The religious immigrant evidently receives a large dose of "Americanism" along with what ever other "ism" he is imbibing.

More directly related to blood pressure, Scotch [5] found that church attendance was negatively related to hypertension among a sample of rural-to-urban Zulu migrants: "The more frequent the attendance at church, the greater was the prevalence of normal blood pressure".

### METHODS AND PROCEDURES

The data for this study were collected from a non-probability sample of 75 immigrants representing 19 different countries and now residing in Toledo, Ohio. The sample consisted of 41 males and 34 females. There were 51 Catholics, 14 Protestants, 7 "others", and three respondents reported no religious affiliation.

Interviews were conducted in the respondents' own homes. Blood pressure measurements were taken using a standard mercury sphygmomanometer with the velcro cuff attached to the seated respondent's left

arm. Sphygmomanometer and researcher performance was checked by a medical professional on several occasions. These quality checks were congruent within 4 or 5 millimeters of mercury (mm Hg) either way.

Assimilation scores are based on a composite index consisting of attitudinal and behavioral referent. The 12 item Likert-type index contains such statements as "I often feel conscious of my non-American background", "I feel completely at home in America", and "I prefer the company of native Americans to that of my native countrymen". The behavioral referents were the acquisition of American citizenship and membership in ethnically-oriented clubs or organizations. Citizenship status contributed strongly to an individual's score since it is perhaps the most dramatic step in the assimilation process. Membership in ethnic organizations is not indicative of a desire to cast off the old in favor of the new. In accordance with this view, it was decided to deduct two points from the cumulative assimilation total for each membership held in such organizations.

Anomie was measured by McClosky and Schaar's Anomy Scale [17].

The religious dimension was measured by church attendance and by how important the respondent considers religion to be in his or her life. For our purposes, "church attendance" means attendance at religious services of any faith for the purpose of worship or fellowship. The "importance of religion" was introduced to provide a more intrinsic measure of religiosity since a person's relationship with his God cannot always be ascertained by his attendance at formal services. However, it was found that the two dimensions were highly related ( $\chi^2 = 20.6$ ;  $df = 1$ ,  $P < 0.0001$ ). It was therefore decided to limit the analysis to church attendance alone in the interest of avoiding needless repetition.

An index of cardiovascular health was generated to serve as a control variable. This index consists of various hypertension-related factors enumerated in the medical literature such as Height/weight ratio, family history of cardiovascular problems, kidney trouble, and the respondent's exercising, drinking, smoking, and dietary habits. Various other background items not included in the analysis were also asked of each respondent.

### FINDINGS

Analysis is limited to zero and first-order relationships. The small sample size precluded second-order analysis due to inadequate frequencies in most cells. In order to take full advantage of variation within our interval level dependent variable eta (E) is the measure of association used when discussing blood pressure. The *F*-distribution is used for significance testing of eta correlations. The Chi-square distribution is used in all other cases.

Systolic blood pressure ranged from a low of 106 mm Hg to a high of 191 mm Hg, with a mean of 128.3. Diastolic blood pressure ranged from a low of 60 mm Hg to a high of 120 mm Hg, with a mean of 84.2. 24 respondents (32%) were found to be at least borderline hypertensive according to the 140 mm Hg systolic or 90 mm Hg diastolic standard suggested by

Harburg and others [23]. The mean readings of the present sample exceeds the USDHEW [24] national probability sample mean by 2.7 mm Hg systolic, and by 1.9 mm Hg diastolic.

Respondents were coded into low ( $n = 25$ ), medium ( $n = 24$ ) and high ( $n = 26$ ) categories of assimilation. The correlation between systolic BP and assimilation was 0.25;  $F = 4.8$ ,  $P < 0.05$ . Between diastolic BP and assimilation the correlation was 0.36;  $F = 10.7$ ,  $P < 0.01$ . There was a mean difference of 5.5 mm's Hg on the systolic scale and 5.3 mm's Hg on the diastolic scale between the low and high categories of assimilation.

*Biological control variables: age and cardiovascular health*

No significance tests will be made in this section since we merely wish to ascertain whether or not our relationship holds controlling for these two important biological variables.

Age constitutes an important control variable in the present study since both blood pressure levels and assimilation are affected by the passage of time. Respondents were placed into three age categories; 18-34 ( $n = 20$ ), 35-44 ( $n = 34$ ), and 45-74 ( $n = 21$ ). Age was related to systolic and diastolic blood pressure at the 0.44 and 0.48 levels respectively, with blood pressure rising with age. The first-order eta's within the three age categories were 0.11, 0.42, and 0.40, respectively, on the systolic scale, and 0.24, 0.45, and 0.39, respectively, on the diastolic scale. The basic blood pressure/assimilation relationship is somewhat diluted in the youngest age category on both BP scales but strengthened within the other two categories. This is not surprising since the effects of stress require time to manifest themselves in the form of elevated blood pressure.

On the basis of their scores on the index of cardiovascular health, respondents were placed into good ( $n = 35$ ), fair ( $n = 27$ ), and poor ( $n = 13$ ) categories. The zero-order relationships between the systolic and diastolic scales and cardiovascular health were 0.23 and 0.28, respectively, with the highest mean readings on both scales found in the poor category. The first-order eta's within the three categories were 0.43, 0.23, and 0.38 on the systolic scale, and 0.31, 0.36, and 0.39, on the diastolic scale. Not only did the relationship hold, it was strengthened in most categories of our control variables. In those categories in which the relationship was weakened the diminution was minimal. The above tests increase our confidence that stress associated with assimilation has an effect on blood pressure levels independent of known somatic precursors.

*Anomie*

The anomie categories were: low ( $n = 25$ ), medium ( $n = 28$ ), and high ( $n = 22$ ). The correlation between systolic blood pressure and anomie was 0.27;  $F = 5.4$ ,  $P < 0.01$ . On the diastolic scale it was 0.34;  $F = 9.4$ ,  $P < 0.01$ . While Table 1 reveals that the assimilation/anomie relationship fails to attain statistical significance (actual  $\chi^2$  value = 0.052), we maintain that it is substantively significant. The gamma coefficient of -0.32 supports the theoretical assertion that the

Table 1. Assimilation and anomie

Assimilation	Low	Anomie Medium	High
Low	8.0% ( $n = 6$ )	9.3% ( $n = 7$ )	16.0% ( $n = 12$ )
Medium	9.3% ( $n = 7$ )	17.3% ( $n = 13$ )	5.39% ( $n = 4$ )
High	16.0% ( $n = 12$ )	10.7% ( $n = 8$ )	8.0% ( $n = 6$ )
Total N	25	28	22

$$\chi^2 = 9.39, df = 4, P = 0.052 \text{ NS.}$$

greater the degree of anomie the less is the likelihood of successful assimilation.

*Religion*

Those who attended church for the purposes of worship or fellowship at least 12 times per year numbered 39. Non-attenders numbered 36. The relationship between systolic and diastolic blood pressure and church attendance were 0.17 and 0.09, respectively; neither relationship being statistically significant. Mean blood pressure readings for church attenders were 5.1 mm's Hg lower than those of non-attenders on the systolic scale, and 4.9 mm's Hg lower on the diastolic scale.

Table 2 shows that church attenders are more assimilated into American culture than are non-attenders. Our assumption of temporal sequence is that church attendance leads to assimilation. The possibility exists, however, that religious participation only commenced after the immigrant felt sufficiently at home in America. Unfortunately, no attempt was made to ascertain when the immigrant started attending religious services, i.e. whether he sought solace in the church as a practice begun in his own country and continued here, or whether religious participation is a form of assimilation and not really a separate variable. A definitive answer to this question must await further research.

Table 3 reveals that church attenders experience less anomie feelings than do non-attenders. The argument could be made that low anomie leads to church attendance and that high anomie prevents an immigrant from participating in community worship. Again no unequivocal statement about temporal ordering can be made. However, in terms of the logic contained in the literature review, we maintain that

Table 2. Assimilation and church attendance

Assimilation	Church attendance Yes	No
Low	10.7% ( $n = 8$ )	22.6% ( $n = 17$ )
Medium	17.7% ( $n = 13$ )	14.7% ( $n = 11$ )
High	24.6% ( $n = 18$ )	10.7% ( $n = 8$ )
Total N	39	36

$$\chi^2 = 6.68, df = 2, P < 0.05.$$

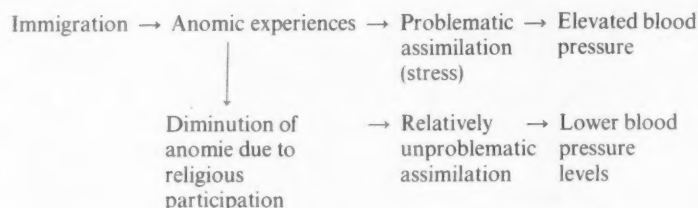


Table 3. Anomie and church attendance

Church attendance	Low	Anomie Medium	High
Yes	25.3% (n = 19)	16.0% (n = 12)	10.7% (n = 8)
No	8.0% (n = 6)	21.3% (n = 16)	18.7% (n = 14)
Total N	25	28	22

$$\chi^2 = 8.86, df = 2, P < 0.02.$$

the sequence is as follows:



To elaborate: it is assumed that all immigrants experience varying degrees of anomie which retards the assimilation process. Some immigrants are left to their own resources to resolve the ambiguities inherent in a change of culture. Other immigrants find a smoother cultural transition through the medium of religious participation with its attendant intrinsic and extrinsic satisfactions. As a consequence of a relatively unproblematic cultural adjustment, church attenders should evidence lower blood pressure levels than non-attenders.

When we examine the basic blood pressure/assimilation relationship controlling for church attendance we observe that church attendance is a powerful suppressor variable in the present sample. On the systolic scale within the church attender category the eta correlation was 0.32;  $F = 3.6$ ,  $P < 0.05$ . This finding represents a slight increase over the zero-order correlation of 0.25. The corresponding first-order eta within the non-attender category was 0.55;  $F = 14.2$ ,  $P < 0.001$ . On the diastolic scale within the church attender category the eta correlation was 0.29;  $F = 3.1$ , NS. This finding represents a slight decrease of the initial zero-order correlation of 0.36. The corresponding first-order eta correlation within the non-attender category was a strong 0.61;  $F = 19.5$ ,  $P < 0.001$ .

#### DISCUSSION

The most obvious limitation of this study is the small sample size which limited a more systematic statistical analysis. Although the correlations obtained were gratifying, the size and non-probability nature of the sample does not make them compelling. Consequently, this study should be considered exploratory rather than explanatory in nature.

Our analysis of religion, as operationalized by church attendance, strongly suggests that it has a powerful impact on the blood pressure/assimilation relationship. Various authors [25, 26] have found significant differences between Catholics and Protestants with respect to susceptibility to coronary heart dis-

ease. The greater susceptibility of Protestants is invariably explained by the Protestant's hard-driving achievement ethic and his sense of personal responsibility for his own salvation. Our study is not concerned with differences in denominational *weltanschauung*, but rather with religious participation as a catalyst in the assimilation process. We believe that religious association functions to diminish the immigrant's anomic feelings, provides him with a sense of continuity in his life, a sense of security in situations fraught with uncertainty, and provides him with a

new sense of belonging. The statistics suggest that while religious association does not completely shield the immigrant from the stress of assimilation, it does provide some answers to the many frustrations inevitably experienced, and may well be the Marxian opiate which serves to attenuate the conundrums of the new culture.

Durkheim [27] has stated that religion is a unified system of beliefs and practices which unites adherents into one single moral community. The immigrant may, therefore, not only consider himself to be part of the church which he attends, but also a part of the larger social whole of which the church itself is a part. This contention is supported by the statistically significant finding ( $\chi^2 = 3.85$ ;  $df = 1$ ,  $P = 0.05$ ) that church attenders are more likely to become U.S. citizens than are non-attenders. It goes without saying that church membership provides opportunities for extended interaction with native American members, not only through church services, but also through many of the church's ancillary functions. Such interaction not only provides an opportunity to learn the realities of American life, but also serves as a source of positive affect, and a chance to test the cliché "A trouble shared is a trouble halved".

The non-religious immigrant, on the other hand, is "set free to deal with the world in all its brute objectivity" [28]. He is "free" to grapple with his profound life change without the comforting aphorisms of the church and its fellowship. Such reliance on one's own mental resources may tend to diminish prospects of assimilation, and hence increase the probability of elevated blood pressure.

#### REFERENCES

1. Lundberg U., Theoral T. and Lind E. Life chances and myocardial infarction: individual differences in life change scaling. *J. Psychosom. Res.* **19**, 27, 1973.
2. Coddington R. The significance of life events as etiological factors in the diseases of children—II. A study of a normal population. *J. Psychosom. Res.* **16**, 205, 1972.

3. Dohrenwend B. Life events as stressors: a methodological inquiry. *J. Hlth Soc. Behav.* **14**, 167, 1973.
4. Syme L., Hyman M. and Enterline P. Sociocultural factors and coronary heart disease. *Soc. Inquiry* **34**, 81, 1964.
5. Syme L., Borhant N. and Buechley R. Cultural mobility and coronary heart disease in an urban setting. *Am. J. Epidemiol.* **82**, 334, 1966.
6. Scotch N. Sociocultural factors in the epidemiology of Zulu hypertension. *Am. J. publ. Hlth* **53**, 1205, 1963.
7. Cruz-Coke R., Etcheverry R. and Nagel R. Influences of migration on blood pressure of Easter Islanders. *Lancet* March, 697, 1964.
8. Selye H. *The Stress of Life*. McGraw-Hill, New York, 1956.
9. Sadler W. *Modern Psychiatry*. Mosby, St. Louis, 1945.
10. *Psychology of Personal and Social Adjustment*. American, New York, 1953.
11. Jung C. *Modern Man in Search of Soul*. Harcourt, New York, 1933.
12. Fairchild H. *Race and Nationality*. Ronald Press, New York, 1947.
13. Stonequist E. *Marginal Man*. Scribner, New York, 1937.
14. Frost I. Homesickness and immigrant psychosis. *J. ment. Sci.* **84**, 801, 1938.
15. Sanua V. Immigration migration and mental illness: a review of the literature with special emphasis on schizophrenia. In *Behavior in New Environments* (Edited by Brody E.). Sage, Beverly Hills, CA, 1969.
16. MacIver R. *The Ramparts We Guard*. Macmillan, New York, 1950.
17. McClosky H. and Schaar J. Psychological dimensions of anomy. *Am. Soc. Rev.* **30**, 14, 1965.
18. Durkheim E. *Suicide*. Free Press, New York, 1966.
19. Nisbet R. *The Social Bond*. Knopf, New York, 1970.
20. Moss G. *Illness, Immunity, and Social Interaction*. Wiley, New York, 1973.
21. Finney J. A theory of religious commitment. *Soc. Anal.* **39**, 19, 1978.
22. Christenson J. and Wimberly R. Who is civil religious? *Soc. Anal.* **39**, 77, 1978.
23. Harburg E., Erford J., Chape C., Hauenstein L., Schull W. and Schork M. Socioeconomic stressor areas and black-white blood pressure: Detroit. *J. chron. Dis.* **26**, 595, 1973.
24. U.S. Dept. of Hlth, Educ., and Welfare. Advance data: blood pressure of persons 6-74 years of age in the United States. National Center for Health Statistics, Washington, D.C. 1976.
25. Lehr I, Messinger H. and Rosenman R. A sociobiological approach to the study of coronary heart disease. *J. chron. Dis.* **26**, 13, 1973.
26. Wardwell W., Hyman M. and Bahnson C. Socio-environmental antecedents to coronary heart disease in 87 white males. *Soc. Sci. Med.* **2**, 165, 1968.
27. Durkheim E. *The Elementary Forms of Religious Life*. Free Press, New York, 1947.
28. Barrett W. *Irrational Man*. Doubleday, Garden City, NY 1962.

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## PROBLEMS IN DESIGNING AND IMPLEMENTING CULTURALLY RELEVANT MENTAL HEALTH SERVICES FOR LATINOS IN THE U.S.

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**Abstract**—Passage of the Community Mental Health Centers Act in 1963 by the U.S. Congress reflected a new concern with providing mental health services to previously underserved communities, many of them minority communities in the inner cities, and a new goal of primary prevention through social change. It has been assumed that utilization by non-white, non-middle class patients will increase when services are "culturally relevant". One group which has consistently underutilized mental health services is Latinos, who comprise the second largest—and fastest growing—minority in the U.S. Three constituencies active in planning mental health services for Latino populations are: (1) governmental funding agencies, (2) social scientists, and (3) Latino activists. They have each approached the issue of cultural relevance in mental health service delivery from different perspectives: governmental funding agencies stressed geographic proximity to services; social scientists pointed out the need to recognize indigenous, folk belief systems and practitioners; Latino activists saw the key to cultural relevance in staffing patterns providing bilingual, bicultural staff. While many would uncritically accept these assumptions, the three constituencies involved in planning and delivering mental health services have frequently clashed and actual changes in service delivery have been difficult to implement. A case study which illustrates the difficulty of implementing—and defining—culturally relevant services in a Mexican/Chicano community mental health center is presented. Directions for future research to develop and evaluate culture-specific treatment modalities are suggested.

### INTRODUCTION

The Community Mental Health Centers Act of 1963 was passed in a unique historical context, at a time when the Civil Rights Movement was promoting the idea of social justice, revived ethnic pride among minorities, and basic social change in the U.S. In addition, President Kennedy had a deep personal interest in mental health, and campaigned on a platform of increased services to the mentally ill.

Passage of the Community Mental Health Centers Act by the U.S. Congress signaled a departure from traditional psychiatric treatment, calling for a broader spectrum of services—which were to include inpatient, outpatient, emergency services, consultation and education—and for increased access to services for a wider range of people [1]. There was to be a new concern for primary prevention reflecting the belief that community mental health included basic change and alteration of the socio-economic and structural factors believed to contribute to poor mental health [2]. There was also to be increased access to services through location of services in geographic proximity to previously underserved minorities, especially Blacks and Latinos.

The terms "Latino" and "Hispanic" are used to refer to the Spanish speaking populations in the U.S., which constitute the country's second largest minority with a population of 11.2 million. It is estimated that by the year 2000 Latinos will be the largest minority group in the U.S. with a population of 55.3 million, due to a high fertility and steady immigration from Mexico and Puerto Rico.

For political and funding purposes, there is little distinction made between the Mexican, Puerto Rican,

Cuban, and South American groups which are lumped together as "Latinos"; in the paper we use the more global term "Latino" in discussing culturally relevant services to the Spanish speaking in general. Of the groups subsumed under the designation of Latino, the largest is an estimated 6.6 million of Mexican descent. Population figures do not include the roughly 6–7.4 million undocumented workers, the majority of whom are also from Mexico [3]. The case study presented here deals with a specifically Mexican population; the term "Chicano" is used to indicate people of Mexican descent who have been in the U.S. for more than one generation and follows popular usage in the community to distinguish recency of arrival from Mexico.

Despite the intentions of the Community Mental Health Centers Act to increase access to services among minorities, a major theme in the literature on mental health in Latino populations has been that services are consistently underutilized. A number of factors are presumed to account for underutilization, among them:

1. Culturally based differences in the perception and interpretation of mental illness so that only severe pathology is presented for treatment [4].
2. Use of alternative mental health resources such as "folk healers", priests, and general practitioners [5–10].
3. Lack of accessibility to appropriate mental health services due to linguistic, class, cultural and institutional barriers [11].

Whatever theory is used to account for underutilization of mental health services—at least institution-



alized services—by Latinos, there is general agreement that ability to communicate in Spanish is an important factor in increasing utilization. Beyond this, however, there has been little agreement about what other components contribute to making services “culturally relevant”, and actual changes in either the content or style of services have been difficult. The following paper discusses some of the difficulties in defining cultural relevance and in implementing changes in the service delivery system to the Latino population.

The case history of a community mental health center in the Midwest illustrates the impact of shifting funding priorities on service delivery models, and the difficulty of translating theories about culturally relevant services into actual practice.

We focus on three constituencies whose perspectives on culturally relevant services have changed and sometimes clashed over the years since 1963, but which have had direct effect on the development of community mental health centers such as the Chicano Mental Health Center described in the case study. These constituencies are identified as:

- A. Governmental funding agencies.
- B. Social scientists.
- C. Latino Community Activists.

#### THE MANY MEANINGS OF CULTURAL RELEVANCE

##### *The federal and state mental health agencies*

The concept of “cultural relevance” was not specifically defined or mandated in the Community Mental Health Centers Act. The intent was to increase accessibility to services by:

1. Locating them in communities to assure physical accessibility;
2. Mandating education–consultation services and community organizing efforts as preventive components within CMHC’s;
3. Using paraprofessional staff who could “relate” to patients and provide social services; and
4. Ensuring community input through mandatory community advisory boards.

The notion of “catchment areas” was developed to ensure that services would be physically accessible to a defined population, and that centers would become identified with specific communities. Manpower programs, such as the New Careers Program, were designed to provide a pool of trained paraprofessionals, who could theoretically communicate and “relate” better to patients from the communities and of shared ethnicity.

While the initial policy statement in the form of the Community Mental Health Centers Act contained some novel approaches to cultural relevance, e.g. physical accessibility, community boards, and paraprofessional staff, the initial focus of the Act quickly dissipated. Community activists soon demanded a “piece of the action” in the form of jobs, support for community organizing efforts and community control of the new mental health services. Professional mental health workers were confused by the sudden change in traditional roles and the focus on social change rather than individual psychopathology. All these

pressures contributed to a rapid “retrenchment”:

Amid these fierce buffetings, the CMHC’s gradually moved towards the more traditional activities of individual and small-group care and consultation on request. Optimistic forecasts of what community psychiatry could do for social reform in the “total community” declined, as did the claims made for the Great Society programs as a whole. Justification for the CMHC programs shifted from social reorganization to the provision of customary services to alleviate individual deprivation and illness [2].

Gradually, the “education and prevention” goals of the Community Mental Health Centers Act became diluted by the increasing attention given by funding agencies to the goal of community-based “after-care” for deinstitutionalized mental patients. With the end of the original 8-year federal funding for community mental health centers, there was a move to concentrate on special populations, defined by pathology rather than ethnicity or social class. With this new approach to funding, cultural relevance became irrelevant.

##### *Social scientists: Anthropology and cross-cultural psychiatry*

Recent studies in Medical Anthropology and Cross-Cultural Psychiatry have identified important ways in which cultural and social factors affect mental health status and treatment, and have provided ethnographic data on mental health issues in Latino populations. These studies have emphasized the importance of:

1. Folk healers and their role in the delivery of services [12, 13].
2. Belief systems regarding mental illness and expectations about treatment [14–16].
3. Acculturation and its impact on the mental health of ethnic communities [17, 18].
4. The emotional support derived from the extended family in Latino populations [19, 20].
5. Ethnic differences in psychopathology [22].
6. The identification of culture-bound syndromes [23, 24].

Specific recommendations for culturally relevant mental health services have focused on the incorporation of folk healers, or indigenous curers, into the mental health delivery system. Such healers include *curanderos*, *espiritistas* and *santeros*.

According to anthropological reports, the appeal of folk healers is that healer and client share a similar belief system regarding the etiology of emotional illness (usually based on supernatural factors) and its treatment. Folk healers tend to view emotional illness in a social and religious context rather than as a strictly biological event.

In sum, the academic community stressed the importance of taking advantage of indigenous healers, becoming aware of culturally defined systems of disease etiology and treatment, and evaluating behavior symptomatic of mental illness in a cultural as well as a medical–psychiatric context.

##### *The community activists*

The emphasis on social change and paraprofessional workers threatened both professional roles and tradi-

tional territories. Many professionals felt uncomfortable with these new, nonclinical goals. Controversy persisted around such issues as what credentials were necessary and what the proper roles of professionals and paraprofessionals were within the CMHC's.

The concept of community-based services had suddenly created a third constituency: Latino community activists. For activists, cultural relevance was often equated directly with a lack of the professional training which had produced mental health "experts" who were too removed from community problems. For community activists, cultural relevance clearly hinged on staffing patterns, and would naturally emerge if the staff was Latino, bilingual, and familiar with community problems. Training was thought to be less important in delivering services than was intuitive "street knowledge".

All of the interpretations and strategies outlined above—those of the federal policy makers, the social scientists, and the community activists—reflect innovative approaches to designing culturally relevant mental health services. Yet it has proved difficult to actually implement changes in service delivery and even more difficult to evaluate what contributes to "culturally relevant" services.

The following case history illustrates some of the contradictions in the definitions of culturally relevant services, and the difficulty of effecting changes in programs due to the shifting priorities of the mental health system.

#### *A case history: The Chicano Mental Health Center (CMHC)*

In 1966, a program was designed jointly by various university and state mental health institutions at the nearby medical complex, and funded by the National Institute of Mental Health under the 8-year funding guidelines of the 1963 Act. The grant proposed to offer inpatient and specialized psychiatric services at the medical complex, and to place three outposts within a catchment area which included Mexican, Middle-European, and Black communities. The Chicano Mental Health Center (CMHC) was the "Mexican Outpost" in the catchment area.

The goals of this proposal specifically addressed the issues of cultural relevance, and reflected the new spirit-of the Community Mental Health Centers Act. They included:

- (1) Involving community residents in decision-making for the project,
- (2) Facilitating community organization as a preventive activity, and
- (3) Providing culturally relevant care to the non-white, non-middle class residents of the catchment area.

The goal of culturally relevant services "... was strongly related to the assumption that social and cultural factors played a key role in the childbearing process and in adult personality functioning" [25].

In 1967 when the CMHC was established, the community in which it was located was rapidly becoming predominantly Mexican after a long history of successive Middle-European populations. The Mexican

population was young, spoke primarily Spanish, and worked as unskilled labor or in small retail businesses. The remaining Middle-Europeans were elderly and many still spoke their native languages of Polish, Lithuanian, and Czech. They were retired, and were gradually following their adult children to the western suburbs.

Today, this community can be described demographically as Mexican and Chicano, low income (average: \$8000/yr.), young (50% of the population is under 18 years of age), with large families, and Spanish as the predominant language. There is a thriving retail business of restaurants, taverns, and other stores offering a wide range of traditional Mexican foods, clothing, and religious items. Of the 500,000 Latinos in Chicago, 110,000 are located in this community and it is the largest Latino *barrio* in the midwest.

At the beginning of the program, staff from the in-patient psychiatric facility in the medical complex were shifted out to comprise the staff of the outpost. A Chicano Director for the CMHC was hired, but the clinical staff was composed of Anglo females. Some paraprofessional slots were filled with Chicanos from the community who began doing the organizing and out-reach functions described in the guidelines of the Act. However, the patients using the CMHC mirrored the ethnic make-up of the staff; since the clinic staff could not communicate with Spanish speaking residents in the community, they retreated into delivering traditional psychiatric services to a population of elderly, and chronically ill, Middle-Europeans who had been deinstitutionalized into the community [25].

Gradually, Anglo staff members who left were replaced with Latinos and the patient population soon changed to reflect the new ethnic makeup of the staff. In 1973, a New Careers program geared to recruiting and training Chicanos in mental health fields was developed by activists, aimed at developing skills in such areas as counseling while emphasizing the importance of cultural relevance to the delivery of non-traditional mental health services. Many of the paraprofessional staff of the CMHC went through this program and went on to continue their education. Thus, the CMHC has operated as a career ladder for its Chicano staff, but in the process lost the benefits from their training.

Another interesting aspect of the CMHC and its search for "cultural relevance" is the fact that there was anthropological input through a Community Research Unit staffed by a team of applied anthropologists.

Yet, their data had little impact on actual service delivery and there were inter-disciplinary communication problems from the beginning: clinical staff did not see ethnographic information as helpful to them in day-to-day practice. A basic problem, as the theme of this paper suggests, was the gap between ethnographic data and the actual implementation of programs and treatment styles to reflect this information. There was always a gap between the paraprofessional staff interested in preventive programs, and the clinical staff who took a more narrowly psychiatric view of treatment. The inability of the anthropological team to bridge this gap is in part due to unresolved differences about the mission of the mental health center as well as the proper role of the mental health

worker—differences which are not unique to the CMHC [27]. The result was that while attempts at communication with the clinical staff declined, the anthropologists became active with the paraprofessional staff and administration of the CMHC in community action efforts. Consistent with the social change goals of the original legislation, the CMHC provided "consultation and education" to a number of community groups attempting to begin programs. The anthropologists collected epidemiological, demographic, and ethnographic data which—along with the staff support, phones, desks, and office supplies provided by the CMHC—helped in the funding of other preventive mental health programs such as a polydrug abuse program for youth and a rehabilitation program for heroin addicts.

In 1975, the federal funds ran out. The CMHC formed a separate corporation to secure continued funding at the state level from the Illinois Department of Mental Health (IDMH).

With IDMH funding, program priorities were forced to change drastically: there were no longer monies for prevention nor consultation and education. The emphasis and sole priority of the state was Clinical Services and more specifically, after-care. Accordingly, paraprofessional slots were eliminated and new clinical programs such as a Day Treatment Program, and Sheltered Workshop were developed to meet the rehabilitation needs of chronically ill patients.

The emphasis on after-care is an example of how funding priorities ignore the epidemiological needs of the community to be served, and jeopardize the concept of culturally relevant services. Clearly, in a population that is demographically young, poor, poorly educated, and has recently undergone the stress of migration and culture shock, after-care is not the most pressing mental health issue. Special needs in this young, Mexican community include crisis intervention and case work, perinatal health care, alcoholism and drug programs, counseling and social service programs for children and adolescents, and services for patients who are in the U.S., illegally and fear deportation. Yet, despite the epidemiological needs in the community, state funding currently restricts 75% of CMHC budget to the after-care program which serves a population of 200 chronically ill, schizophrenic patients, 40% of whom are Anglo.

Over the past 10 years, certain facets of the CMHC have developed on the assumption that they will result in culturally relevant services: the hiring of bilingual, Latino staff, the participation of the anthropologists and other staff in community action efforts, and the development of local paraprofessional staff through a New Careers program. However, there has been little change in actual treatment modalities: the services of the CMHC as funded by the Illinois Department of Mental Health are limited to traditional, out-patient, after-care and workshop.

Some of the contradictions inherent in the theories of cultural relevance put forth by the three constituencies—the governmental funding agencies, the social scientists, and the activists—as well as some of the difficulties in translating theories of cultural relevance into actual culture-specific treatment modalities merit discussion.

## DISCUSSION

### *Governmental funding agencies*

Part of the difficulty in defining culturally relevant services for Latino populations lies in the basically incompatible goals of the Community Mental Health Centers Act of 1963 which calls for: (1) preventative programs which would alleviate potential environmental hazards to general mental health, and (2) clinical out-patient programs which were to allow for the deinstitutionalization of chronically ill patients into the community [26].

The task of long-term treatment of deinstitutionalized patients was (and is) a monumental task, calling for specific clinical skills and medical interventions. The task of "improving the mental health of communities" is also a monumental task, calling for a staff with different skills. The relative priority of each of these goals was never clarified.

Federal and state funding agencies quickly abandoned the goal of social change (via "consultation and education" funds) and retreated into the more traditional preoccupation with clinical after-care which had repercussions for staffing patterns as well as program activities and design. The change in orientation from prevention to clinical services also changed the "population to be served" from being the total community to being only those individuals exhibiting a specific pathology.

### *Social scientists*

The anthropologists and cross-cultural psychiatrists, have also had little impact on the implementation of innovative services.

Medical anthropologists have... talked a great deal about the role of cultural and community variables in service provision. Most frequently this discussion has taken the form of documentation of the survival of traditional folk medical systems which continue to be salient as alternatives to American health care. The message to medical personnel is that they must be *aware* of such alternative medical systems. However, this information production while identifying the need for culturally relevant services provides little help in determining how such services should be organized [27].

One concrete suggestion made by anthropologists has been to incorporate folk healers—*curanderos*, *espiritistas*, *santeros*—as mental health resources for Latino patients. Recommendations have focused on how the folk healers can interact with staff of the mental-health center as auxiliary therapists or as part of a mutual referral network. In our opinion, these suggestions have ignored the lack of data on the actual rates of use of folk healers in urban Latino populations and for what types of problems they are used [4, 28]. As Pattison points out, it has become fashionable to talk of developing working relationships between scientifically oriented psychotherapists and folk healers without clearly delineating what that relationship should consist of, and how differences in worldview will be overcome [29].

Recommendations to incorporate folk healers into the mental health system to increase the "relevancy" of those services for a Latino population overlook another factor: self-selection by patients. It is perhaps not realistic to expect individuals with alternative



belief systems to use the mental health system—whether there is a *curandero* on staff or not—any more than it would be realistic to expect a patient who has indicated his belief in “scientific” medicine by coming to a mental health center to be satisfied with a referral to a folk practitioner [cf. 9].

#### *Latino community activists*

The third constituency, Latino activists, have consistently emphasized the importance of staffing patterns in delivering culturally relevant services. They see the presence of bilingual, bicultural staff as a minimum requirement for increasing utilization of mental health services by Latino patients. The history of the CMHC supports this position, e.g. the patient population tended to mirror the ethnicity of the staff, becoming more Latino as the staff became more Latino.

It is generally agreed that therapy is most effective when provided in the primary language of both patient and therapist [30]. Research suggests that diagnosis is affected by a lack of linguistic match between patient and therapist, with the therapist tending to see more psychopathology if predominant language is not shared [31, 32].

In the sixties, activists called for the hiring of “community-based” paraprofessionals, insisting that their very lack of professional training made them able to “relate” to patients. One study, by the Group for the Advancement of Psychiatry, attempted to distinguish what was special about paraprofessional workers in a more objective fashion. It suggested that paraprofessionals in general are more proficient “in the realm of practical activity” than professionals, and that the “know-how” of survival is a very real skill which should be studied and incorporated into the training of professionals [33].

Six factors were identified by paraprofessionals as contributing to their ability to establish a closer alliance with patients:

1. Empathetic feeling for the patient's experiences.
2. Sense of geographic continuity resulting from both working and living in the community.
3. A feeling that they had themselves lived through the stresses being experienced by patients.
4. A conviction that their past life experiences had trained them well for their work in mental-health.
5. Greater flexibility and mobility in meeting with the patient than traditionally trained persons.
6. Ease of verbal communication in terms of language use and language style.

This assessment suggests that in addition to shared language, experiential background (of which social class is certainly one aspect) provides specific skills—empathy, flexibility, and verbal facility—which contribute to relevant services. Recently, it has been suggested elsewhere that social class match is an important component in the communication between patient and therapist, and that lack of class match colors diagnosis, recommendations to treatment modalities, and therapeutic communication [11, 30, 34, 35]. Skills in diagnosis based on understanding of the patient's social situation, and flexibility of treatment approach based on experiential and/or class match between patient and therapist are two specific areas that merit further study.

Community activists have consistently stressed the importance of having not only bilingual staff but bicultural staff. Ethnicity is seen as a crucial component in interpreting “deviant” behavior and in providing patients with an appropriate treatment technique based on shared cultural beliefs and understanding. Yet within the U.S. ethnicity is by no means an objective criterion. Calls for an “ethnic match” between patient and therapist have ignored the subtleties of defining “ethnicity”, the problems of correlating ethnicity with belief systems, and the historical, cultural and generational heterogeneity of the Latino populations in the U.S. Recent recommendations have urged more research and recognition of the heterogeneity of Latino populations in the U.S., and the incorporation of these differences into mental health planning [36, 37].

Most Latino mental health professionals in the U.S. do not ethnically match their patients: most have immigrated from Latin American countries and may have little knowledge of the socio-economic context of Latinos born in the U.S. For example, while the staff of the CMHC is largely Latino, the majority of workers are from Latin American countries: only two reflect the specifically Mexican background of community residents. Martinez (1977) cites statistics compiled by Ruiz on the status of Latinos in the American Psychiatric Association and notes that out of the 3.44% of psychiatrists who are Spanish-surnamed, only 0.54% were U.S. residents. Only 43 psychiatrists nationwide are Chicano [38].

#### *Culture-specific treatment modalities: Current research*

As we have seen in the example of the CMHC, locating a center geographically in a community, and providing Latino staff, is not synonymous with implementing new models of treatment. The lack of implementation of new, culture-specific treatment modalities in general, and specifically at the CMHC, is a result in part of constantly shifting funding priorities and guidelines, as well as difficulty in applying ethnographic or cultural data to the actual design of culture specific service programs in the mental health system.

In recent years, a number of papers emanating from the Spanish Speaking Mental Health Research Center have suggested some models and directions for developing culture-specific modalities [39–41]. These suggestions focus on modalities which (1) incorporate the family in the treatment process and (2) include access to comprehensive social services.

Padilla, Ruiz and Alvarez [49] discuss the “family adaptation model” as a therapeutic model in which family-centered therapy would be offered, perhaps in a home-like setting, and in which the traditional roles of the Latino family might be acknowledged in the therapeutic process or actually reenacted by the therapist. Others suggest that the reliance on the family as a support system indicates a mode of interaction based on personal rather than status relationships. To build on this “culture style”, the style of the relationship between patient and therapist should change to reflect the importance of *personalismo* in Latino culture [36].

The recommendations of the Special Populations Sub-Task Panel on the Mental Health of Hispanic Americans combine a number of these concepts and



propose *Centros Familiares* which would be multi-service centers providing social services as well as psychotherapy, where therapeutic relationships would be "highly personalized", and where the family would be serviced as a whole [37].

While there is disagreement on what kinds of programs and approaches are more appropriate, there is agreement that the existing mental health system does not meet the mental health needs of Latino patients or communities. In part, this conclusion is based on the low rate of utilization of these services by Latinos. In addition, as was noted by the President's Commission on Mental Health: "There is considerable clinical evidence that many of the treatment techniques commonly used in hospital settings and community mental health centers are not effective with Hispanic clients". A basic problem in assessing this situation is the lack of evaluative research data based on the experiences of the community mental health centers era. The commission cites the great need for research on the appropriateness and efficacy of different treatment modalities developed for Hispanics in general as well as specific subpopulations such as Hispanic women, children, and the elderly [37].

In addition to the need for evaluative program research, there is a lack of current research on Latino mental health issues. Existing research tends to assume cultural homogeneity, creates stereotypes, stresses the exotic, and makes simplistic cross-cultural comparisons based on univariate analyses [37]. For example, we have very little information on the epidemiology of alcoholism in Latino populations, the cultural aspects of drinking behavior, or the response to alcoholism treatment programs among Latino alcoholics. Because of the capriciousness of funding policies and a limited world-view about what constitutes mental health, there has been little programmatic change within the U.S. mental health system in the last decade. In short, there are few examples of innovative programs to evaluate, and as Padilla, Ruiz, and Alvarez note:

A recommendation for "innovative" treatment programs is self-defeating unless validating research is conducted. Even more critically, demographic and survey research is needed to guide the development of programs with the greatest probability of success [42].

In summary, many writers have stressed the importance of culturally relevant services, usually defining this in terms of shared language, class, culture, and belief systems. But we have not moved much beyond the rhetoric of the community mental health centers movement of the 1960's in documenting *how* or *if* these are the critical factors.

#### Summary

The constituencies responsible for planning and implementing community mental health programs for Latino populations have had differing interpretations of what constitutes "culturally relevant" services. Three constituencies have been identified—the governmental funding agencies, the social scientists, and the community activists—which have had a major impact on the development of mental health programs for Latinos.

The constituencies involved in *funding* mental

health services have basically retreated to a physical or geographic approach to defining accessibility and cultural relevance: It is assumed that if services are physically located in a community, that they will be accessible, and thus "relevant".

The constituencies involved in *providing* mental health services for Latinos have basically relied on a staffing approach to defining accessibility and cultural relevance: it is assumed that patient population will reflect the ethnic/linguistic composition of staff and that Latino staff will deliver culturally relevant services almost by definition.

Since the enactment of the Community Mental Health Centers Act of 1963, perspectives on cultural relevance have frequently clashed, compounded by ambiguity about professional/paraprofessional roles within the mental health system and about the mission of community mental health in general. The case history of the Latino Mental Health Center was presented to illustrate the difficulty of actually implementing changes in service modalities within the mental health system due to the inability to utilize ethnographic data, shifting funding policies which ignore local epidemiological needs, the specific demography of Latinos working in the mental health system, conflicts over the clinical vs. the activist role of mental health workers, and the goals of community mental health.

What is needed now is the investment of research monies and energy to elucidate concepts of cultural relevance and develop demonstration programs within the various Latino communities, cognizant of their heterogeneity.

#### REFERENCES

1. Kennedy J. F. Message from the President of the United States Relative to Mental Illness and Mental Retardation. Document 58, 86th Congress, Feb. 5, 1963, p. 12.
2. Musto D. Whatever happened to community mental health? *Psychiat. Ann.* 7, 10, 1977.
3. Macias R. F. U.S. Hispanics in 2000 A.D.—projecting the number. *Agenda* 3, 16, 1977.
4. Barrera M. Mexican American mental health service utilization. *Commun. Ment. Hlth J.* 14, 35, 1978.
5. Edgerton R. B., Karno M. and Fernandez I. Curanderismo in the metropolis, the diminished role of folk psychiatry among Los Angeles Mexican-Americans. *Am. J. Psychother.* 24, 124, 1970.
6. Padilla A. M., Carlos M. L. and Keefe S. E. Mental health service utilization by Mexican-Americans. In *Psychotherapy with the Spanish Speaking Issues in Research and Service Delivery* (Edited by Miranda), Monograph No. 3. Spanish-Speaking Health Research Center, UCLA, Los Angeles, California, 1978.
7. Torrey E. F. The case of the indigenous therapist. *Archs gen. Psychiat.* 20, 375, 1969.
8. Ayala F. Folk practices, folk medicine and *Curanderismo* on the west side of Chicago. Paper presented at the *Annual Meeting of the Society for Applied Anthropology*, Miami, 1972.
9. Schensul S. L., Bymel M. B. and Ayala F. Cultural and community factors in health service delivery: A case from a Chicago Chicano community. Unpublished manuscript, 1977.
10. Velosa L. H. The importance of a community mental health center in a Spanish-speaking community. In

- Transcultural Psychiatry: An Hispanic Perspective, Etc.* (Edited by Padilla and Padilla), pp. 55-61. Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1977.
11. Padilla A. M., Ruiz R. and Alvarez R. Delivery of community mental health services to the Spanish-speaking/surnamed population. In *Delivery of Service for Latino Community Mental Health* (Edited by Alvarez R.), pp. 11-39. Monograph No. 2. Spanish Speaking Mental Health Research and Development Program, UCLA, Los Angeles, California 1975.
  12. Rogler L. H. and Hollingshead A. The Puerto Rican spiritualist as a psychiatrist. *Am. J. Sociol.* **67**, 17, 1961.
  13. Romano J. J. Charismatic medicine, folk healing and folk sainthood. *Am. Anthropol.* **67**, 1151, 1965.
  14. Karno M. and Edgerton R. B. Perception of mental illness in a Mexican American community. *Archs gen. Psychiat.* **20**, 233, 1969.
  15. Fitzgibbons D. J., Colter R. and Cohen J. Parent's self perceived treatment needs and their relationship to background variables. *J. consult. clin. Psychol.* **37**, 253, 1971.
  16. Gaviria M. and Wintrob R. Supernatural influence in psychopathology. *Can. psychiat. Ass. J.* **21**, 361, 1976.
  17. Graves T. D. Acculturation access and alcohol in a tri-ethnic community. *Am. Anthropol.* **69**, 306, 1967.
  18. Madsen W. Value conflicts and folk psychiatry in South Texas. In *Magic Faith and Healing* (Edited by Kiev A.). Free Press, New York, 1964.
  19. Fernandez M. R., Maldonado Sierra E. D. and Trent R. D. Three basic themes in Mexican and Puerto Rican Family values. *J. soc. Psychiat.* **48**, 167, 1959.
  20. Diaz G. R. Neurosis and the Mexican family structure. *Am. J. Psychiat.* **112**, 411, 1955.
  21. Maldonado Sierra E. D., Trent R. D. and Fernandez M. R. Neurosis and traditional family beliefs. *Int. J. soc. Psychiat.* **7**, 237, 1960.
  22. Fabrega H., Swartz J. D. and Wallace C. A. Ethnic differences in psychopathology II. Specific differences with emphasis on the Mexican American Group. *Psychiat. Res.* **7**, 221, 1968.
  23. Fernandez M. R. The Puerto Rican syndrome: Its dynamics and cultural determinants. *Psychiatry* **24**, 79, 1961.
  24. Pattison E. M. and Elpers J. A. A developmental view of mental health manpower trends. Paper presented to *Fifth World Congress of Psychiatry*, Mexico City, November, 1971.
  25. Gaviria M., Vasquez A., Holgin P., Gentile M. and Tirado J. A community mental health program for the Spanish-Speaking population in Chicago: Eight years of evolution. In *Transcultural Psychiatry: An Hispanic Perspective* (Edited by Padilla and Padilla), pp. 35-43. Monograph No. 4. Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1977.
  26. Borus J. F. Issues critical to the survival of community mental health. In *Am. J. Psychiat.* **135**, 1029, 1978.
  27. Schensul S. L. Two community mental health programs: A comparative analysis. Paper presented at the *Meetings of the American Psychological Association*, Chicago, 1975.
  28. Alegria D., Guerra E., Martinez C. and Meyer G. G. El hospital invisible, a study of curanderismo. *Archs gen. Psychiat.* **34**, 1354, 1977.
  29. Pattison E. M. Psychosocial interpretations of exorcism. *J. operat. Psychiat.* **8**, 5, 1977.
  30. Torrey E. F. *The Mind Game*. Emerson Hall, New York 1972.
  31. Abad V., Ramos J. and Boyce E. Clinical issues in the psychiatric treatment of Puerto Ricans. In *Transcultural Psychiatry: An Hispanic Perspective* (Edited by Padilla and Padilla), pp. 25-34. Monograph No. 4. Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1977.
  32. Miller S. O. Current status of Hispanic social workers. In *Hispanic Mental Health Professionals* (Edited by Olmedo and Lopez). Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1977.
  33. *The Community Worker: A Response to Human Need*, Vol. 9, Report, No. 91. The Committee on Therapeutic Care, Group for the Advancement of Psychiatry, New York, New York, 1974.
  34. Abad V., Ramos J. and Boyce E. A model for delivery of mental health services to Spanish-Speaking minorities. *Am. J. Orthopsychiat.* **44**, 584, 1974.
  35. Acosta F. X. Mexican American and Anglo American reactions to ethnically similar and dissimilar psychotherapies. In *Delivery of Services for Latino Community Mental Health* (Edited by R. Alvarez), pp. 51-78. Monograph No. 2. Spanish-Speaking Mental Health Research and Development Program, UCLA, Los Angeles, California, 1975.
  36. Alvarez R. et al. *Latino Community Mental Health. Latino Task Force on Community Mental Health Training*. Monograph No. 1. Spanish-Speaking Mental Health Research and Development Program, UCLA, Los Angeles, California, 1974.
  37. *Report on the President's Commission on Mental Health*. By the Special Population Sub-Task Force on Mental Health of Hispanic Americans. Reprinted by the Spanish-Speaking Mental Health Researcher Center, UCLA, Los Angeles, California 1978.
  38. Martinez C. Hispanics in psychiatry. In *Hispanic Mental Health Professionals* (Edited by Olmedo and Lopez), pp. 7-13. Monograph No. 5. Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1977.
  39. Castro F. G. *Level of Acculturation and Related Considerations in Psychotherapy with Spanish-Speaking/Surnamed Clients*. Occasional Paper No. 3. Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1977.
  40. Ruiz R., Casas J. M. and Padilla A. M. *Culturally Relevant Behavioristic Counseling*. Occasional Paper No. 5. Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1977.
  41. Miranda M. R. *Psychotherapy with the Spanish-Speaking: Issues in Research and Service Delivery*. Monograph No. 3. Spanish-Speaking Mental Health Research Center, UCLA, Los Angeles, California, 1976.
  42. Padilla A. M., Ruiz R. A. and Alvarez R. Delivery of Community Mental Health Services to the Spanish-Speaking/Surnamed Population. In *Delivery of Services for Latino Community Mental Health* (Edited by Alvarez R.), Monograph ed. No. 2. Spanish-Speaking Mental Health Center, UCLA, Los Angeles, California, 1975).

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## TRADITIONAL AND WESTERN HEALTH CARE AMONG THE ZUNI INDIANS OF NEW MEXICO

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**Abstract**—This study examines the role of traditional and Western health care among the Zuni Indians of New Mexico. Over the past 100 years, changes in the practice of traditional medicine have resulted from alterations in the Zuni life style and the introduction of health care provided by the Public Health Service. These alternative systems of health care are both utilized to a varying extent, determined by many factors. The present-day beliefs and expectations of the Zuni concerning disease, its etiology and its treatment are described in an analysis of the interaction between the traditional and Western health care systems. The value of traditional medical practices is examined and the importance of understanding them is stressed with the goal of increasing awareness of the health care providers of conflicts that may arise with the introduction of Western medicine. Suggestions are made that may facilitate the acceptance of modern health care in communities where traditional medicine plays an important role.

### INTRODUCTION

This is a study of the role of alternative systems of health care utilized by the Zuni Indians, a tribe of approximately 6500 American Indians living in a small community in west-central New Mexico. The Zuni are deeply religious and nearly all social activities are centered around their many religious observances. Although traditionally they have relied heavily upon farming for their subsistence, silver-smithing has become the main source of employment in the past 20 years.

Medical care, provided by the Public Health Service, is widely accepted, yet the Zuni have alternative systems of health care. Traditional medicine is practiced by the native healer (called an *ak'wa:mossi*, in Zuni), who is a member of one of the medicine societies (or fraternities). Another form of traditional medicine is folk remedies, largely herbal, that are well known to the elderly Zuni and which may be administered without seeking the aid of the healer. In addition, there are the bone setters who have special skill in treating sprains and fractures.

Alternative systems of health care exist in other cultures as well. Studies among the Navaho [1], the Cebuanos of the Philippines [2], and the Luo of Kenya [3], have focused upon the nature and the role of traditional medicine and have examined its persistence in spite of the modern medical care that has been introduced. Nor does this situation occur only in primitive or isolated cultures out of the mainstream of technology and modern health care delivery. Throughout the United States a variety of medical beliefs and practices thrives amidst the most advanced medical care available. Included are beliefs in illness attributable to the evil eye, vampires, witches, God's punishment, the Devil or animals within the body. Equally diverse forms of therapy are utilized: herbal folk remedies, Voodoo medicine, acupuncture, Christian Science, homeopathy, osteopathy, and chiropractic [4, 5]. It has been estimated that the practitioners of these alternative forms of health care treat many more persons than do physicians [5].

Some authors have stressed the beneficial role of the traditional therapeutic process [1, 5-7]. Others

have pointed out that traditional medicine may conflict with modern medicine by causing the patient to abandon or to delay seeking proper medical care [2, 8]. In addition, some traditional practices may be harmful [8]. Whatever their effects, the understanding of traditional practices is desirable in order to be able to deliver better, and more culturally acceptable health care [1, 4, 9]. Toward that end, this study of Zuni traditional medicine was conducted (1) to examine the practice of traditional medicine and (2) to increase the awareness of non-Indian health care providers of the role of traditional medicine today.

### TRADITIONAL MEDICAL BELIEFS AND PRACTICES AMONG THE ZUNI

Among the Zuni, natural causes, as well as sorcery, disease-object intrusion and breach of taboo are regarded as the origin of illness [10-13]. When the disease is felt to be of natural origin, the patient need not be treated by an *ak'wa:mossi*. For common bruises, fractures, bites of venomous insects or animals, a supernatural cause may not be sought and treatment is often in the form of folk remedies well known to many Zuni people. The treatment of an abscess with the sap of the pinyon pine tree is an example.

But for

any complicated or mysterious trouble or one which does not yield readily to legitimate medicine, some higher power than man must be called upon to eradicate the disease 'shot' into the person by witchcraft. In such cases the Beast Gods act through their agents, the theurgists, who have great influence, the patient and the family showing every confidence in their doctor... [14].

Each theurgist (or *ak'wa:mossi*) belongs to one of the ten medical fraternities, of which there were originally twelve. The fraternities are included in the cult of the Beast Gods. This cult is one of the six religious cults of the complex Zuni religious system. The Beast Gods "are the most dangerous and violent gods in the Zuni pantheon... They are the givers of medicine, not only medical plants, but the magic power to make them effective. They are the source also of black magic or witchcraft" [10].



The medical societies each practice general medicine but have a specialty as well. "One cures sore throat, another epilepsy, another has efficacious medicine for delayed parturition, yet another cures bullet wounds" [10]. Writing in 1932, Bunzel describes the rituals performed by the *ak'wa:mossi* to cure such illness often believed to be the result of witchcraft and disease-object intrusion [10].

When they see sickness in anyone they draw from his body the foreign substance that has caused it. Dust, stones, bits of calico, feathers, fur or the entrails of animals are extracted from the mouth or other parts of the bodies of patients. Each article as it is extracted is exhibited to the company and dropped into a bowl to be disposed of the following day... It is general knowledge that the "cures" are accomplished by sleight-of-hand. However, such knowledge by no means decreases the respect in which these tricks are held. These practices have the sanction of powerful and greatly feared divinities and are performed directly under their control. The act itself is but a symbol of the relationship with the supernaturals.

The *ak'wa:mossi* performs his cures in a similar manner today. In the case of a gunshot wound with the development of a wound abscess, he visited the hospital. He sat beside the patient who was lying in bed with his chest bare and his dressed wound visible. The *ak'wa:mossi* opened a corn husk packet filled with corn meal and placed it on the floor. As he chanted, and placed his hands on the patient's chest, he produced six small black pebbles one by one and placed them on the corn meal. He later explained that these had been put there by someone (a witch) who wished to harm the patient and for this reason he was not getting better. Before he left he gave the patient a bit of an aromatic root to chew. This ritual appeared to relieve considerably the anxiety of the patient, who was scheduled the next day to be seen in another hospital for re-evaluation of his wound.

The Zuni also believe in breach of taboo as a disease etiology. The occurrence of illness in these cases is related to beliefs in contagious magic and to the idea that "like affects like" as illustrated in the following two examples. With contagious magic, some portion of the victim's body or even an article of clothing will be magically manipulated resulting in disease.

Hair cuttings are burned. Were they thrown out, the winds would scatter the hairs and with them the life and fortune (of the child)... In washing a baby's clothes, much care is taken not to drop any garment—the child would have a bad fall [12].

A pregnant woman should not scatter bran on her oven floor—a method of testing temperature—otherwise her child will have pimples. Albinism is caused by a parent-to-be eating the white leaf inside the corn husk... During pregnancy a husband must be very circumspect in his treatment of animals. Were he to shoot a rabbit or prairie dog, the child would be marked or deformed in a way corresponding to the injury suffered by the animal—blind or lame or malformed [13].

It is difficult to judge to what extent these beliefs are the concern of the Zunis today. They are less prevalent among the more highly educated younger generation, yet among the older Zuni some of these beliefs prevail.

\* Details of this case and the next have been altered to protect the confidentiality of those involved.

In all aspects of their life the Zuni have become more "Anglicized" and health care is not an exception. The Zuni Indian Hospital is operated by the Indian Health Service of the Department of Health, Education and Welfare and provides health care to approximately 6500 residents of the Zuni Indian Reservation and to approximately 2000 Navaho Indians living on the Ramah Navaho Reservation and in the Vanderwagen and Cousins areas to the north of the Zuni Reservation.

A new 45-bed hospital located 3 miles east of the Pueblo of Zuni opened in 1976 to replace the previous hospital which had operated for 40 years. In a typical year in the early 1970's, there were 821 admissions with an average length of stay of 5 days, 107 deliveries and 24,622 outpatient visits. Twenty-four hour emergency services are provided, as well as dental care, optometry, social services and a pharmacy, all at no cost to the Indian patients [15].

#### HEALTH CARE AT ZUNI TODAY

With these 2 contrasting medical systems, there seems to be little conflict on the part of the Zuni. The Zuni healer realizes that the physicians can offer relief to the ailing individual and does not feel threatened by the system. Speaking to several healers, they express a desire to contribute their knowledge and assistance to the Zuni patient in the hospital and to make a cooperative effort to help their people. The "Anglo" physician in general has little contact with the *ak'wa:mossi*. He may be unaware of the extent to which the native healer's services are utilized since the patient often sees him before coming to the hospital. Perhaps the physician's main concern is that traditional therapies do not interfere with his own and that the patients come quickly to the hospital when they are ill without unnecessarily delaying their treatment.

It has been estimated that 90% of patients (excluding those with acute life-threatening emergencies) will first see the *ak'wa:mossi* prior to seeking treatment at the hospital [16]. The desire to be seen by a healer is not restricted to the elderly Zuni for whom the hospital may be more alien than for the younger Zunis who have all grown up with the hospital nearby. Nor are visits to the *ak'wa:mossi* undertaken exclusively by the Zuni who have less contact with the "Anglo" way of life or are less educated.

The following two cases illustrate how a typical Zuni may deal with an illness in the family.

#### Case 1\*

R.L.'s youngest daughter had a rash on her neck. She became concerned and sought the aid of a healer. The child was seen and the *ak'wa:mossi* decided that the rash was caused by red ants. It is believed that if someone steps over a red ant mound he may become ill. One is supposed to walk around the ant's home. Ants are considered commonly to be responsible for the development of rashes. As a part of the treatment, the *ak'wa:mossi* gave the mother a plant to boil in water and told her to apply the infusion to the affected area. There was no improvement after several days and R.L. sought the advice of another *ak'wa:mossi* in a different fraternity. This time the cause was

considered to be "something hot on the back of the head". When questioned further as to what this meant she said that her child was "thinking some kind of thoughts about the past" and that she had to find out what they were. R.L. was now much more concerned about her daughter's problem and the next day she brought her to the hospital at 11:30 p.m. The doctor diagnosed the rash as eczema. Two days later the mother felt that the child's condition was unchanged but she was less worried and was hopeful that the ointment that had been prescribed by the physician would be effective.

#### Case 2

R.B. noticed that his four year old son was acting strangely. He was "breathing heavily and fast", was "more talkative" than usual and "acted like he was drunk". He questioned the rest of the family, asking them if the child had swallowed or eaten anything recently. He thought that the child may have taken some pills from the medicine cabinet.

Over several minutes his son got better, but then the fast heavy breathing recurred and he felt that he should see a doctor at the hospital. The father massaged the child's belly which seemed to help and he asked his wife to get a native healer to see the child. The *ak'wa:mossi* said prayers over the child and performed a ritual to "draw out the cause of the problem"; he removed several objects from his chest and throat. The child appeared to improved and he rested comfortably through the night. Had this therapy failed, he explained that he would have taken the child to the hospital.

Several points are significant as demonstrated in these cases. (1) Most people see the *ak'wa:mossi* prior to visiting the hospital. In Case 2 it is striking that even though R.B. suspected that the child could be treated at the hospital, he chose to see an *ak'wa:mossi* first. (2) The Zuni approach to disease therapy is pragmatic. Patients will continue to seek different therapies until their symptoms are relieved. There appears to be no conflict when multiple diagnoses are made or various therapies instituted. Perhaps as Young [17] suggests

People rarely see a failure to cure as challenging their assumptions about their medical system or the cosmological ideas to which it is bound. Either they ignore the ostensible conflicts by deferring to make any judgments that are not immediate and pragmatic, or they believe that these failures conform with rather than challenge those assumptions. . . . What the Western paradigm calls empirical failures are interpreted in a practical and particularistic context rather than as a test of a particular medical system. For the layman who actually participates in the sickness episode, a failed therapy may be thought important because it offers diagnostic information that points to a more efficacious sort of therapy and a more appropriate category of healer.

(3) Initially a simple or natural cause of the illness is sought or suggested and an appropriate treatment is instituted. If the patient is not relieved, then a supernatural etiology is suspected. In the latter case a native healer is needed for he is the only one who will be able to see the disease object which has been placed in the patient by a witch, or caused by other beings such as bullsnakes. For these more serious ailments, that do not respond to simple folk remedies or

the therapy of the *ak'wa:mossi*, the patients seek help at the hospital. For example a healer outlined his approach when he got a stomach ache. First it was assumed that he had eaten something that disagreed with him. He spoke of "acid in his stomach that made it burn". He would force himself to vomit by taking a plant medicine or by using a feather to tickle the back of his throat. But if this did not bring relief, he suspected some form of sorcery and sought the aid of an *ak'wa:mossi*. Perhaps someone he worked for did not like him or was angry at him for some reason. That person may have witched him. If the *ak'wa:mossi*'s therapy was not effective he went to the hospital wondering whether he had an ailment that only the physicians could treat. "Perhaps there was something wrong with the kidneys or gallbladder."

In the following section, three clinical conditions have been chosen to further elucidate the interaction of traditional and Western health care practices at Zuni.

#### CHILDBIRTH

Changes have occurred in Zuni childbirth practices. In 1917, the physician at Zuni had no obstetrical cases [13]. It was not until the period between 1945 and 1950 that women began to come regularly to the hospital to give birth. This reluctance to utilize the hospital services was undoubtedly related to firmly held beliefs and a desire to continue traditional practices.

Today practically all childbirth takes place in the hospital, yet some traditional practices persist. The following description of childbirth in the early 20th century will serve as a comparison with the modern trends [12, 13]. Childbirth took place at home and the mother was attended only by women during labor. Men were sent out of the house as their presence was believed to change an unborn girl into a boy, the less desired sex among the Zuni. The women assisted the mother by massaging her abdomen to speed parturition. A raw bean could be given to the mother to swallow to ease the labor. As it slipped down with ease, so the delivery would be easy. Specific herbal teas were also prepared for the mother to hasten delayed parturition [18].

After birth, the child was bathed with an infusion prepared from the twigs of a juniper tree. Ashes from the burnt twigs of saltbush and juniper were rubbed on the child's body to make him or her depilous. A boy was treated on the face so that a beard or moustache would not grow when the child became older. For 4-8 days the mother remained indoors, lying on a bed of hot sand that was covered with a blanket, and had a warm stone pressed against her abdomen. A similar bed was made for the child. During this period, the mother could drink only liquids that were hot. She was given a tea prepared from juniper twigs which was supposed to make all the blood come out of her uterus and leave none to make another child who would be born small and sickly. All of the mother's food had to be eaten hot as well.

The newborn was seldom left alone, as it was feared that he might be witched. To prevent any harm, a special ear of corn was laid beside the child. On the morning of the eighth day, the baby's paternal grand-

mother took the mother and the child outdoors and presented the child to the sun. Their hair was bathed with a shampoo prepared from the root of the yucca plant.

Today at Zuni the mother may return home from the hospital after giving birth and remain indoors for the traditional period after which the child is presented to the sun as described by Parsons. As the Zuni still believe in witchcraft, the baby is seldom left alone [19]. Some women in the hospital eat or drink only hot foods. Occasionally juniper tea is consumed. It is reported "to act like ergot", "to stop the cramps and bleeding" after birth, and "to prevent the mother from being able to have a child too soon". In one case, the pregnant wife of one of the physicians was given an herbal tea by a Zuni woman to hasten parturition.

To summarize the trends in childbirth today, it appears that although the traditional practices are waning, the beliefs are still prevalent.

#### EPILEPSY

Epilepsy is of great concern to the Zuni. Historically one of the twelve medicine societies, the Shumakk'we specialized in the treatment of convulsions [14]. It is believed that the actions of the pregnant mother or expectant father may affect the newborn child [13]. Hunting is taboo for the father because it is feared that the same fate will befall the child as the hunted animal: should a rabbit or prairie dog die in convulsions after being shot, the child may be born with a convulsive disorder. To treat the disease another animal must be slaughtered in the same way and then as it dies in a convulsion, the animal or foam from its mouth must be placed upon the child [20].

Seizures may also be the result of a sudden startle in the past, stresses or "to many thoughts in the mind". Treatment in this case requires a 4-day ceremony in which a tent is constructed in the central room of the house and the patient placed inside with steam from hot rocks and the odors of special plants. The patient is also given various plants that induce vomiting [20].

In a study of febrile seizures among Zuni children [21], the families of 17 patients were interviewed about the details of the seizures. Several patients (41%) had been to the *ak'wa:mossi* at least once for the treatment of their seizure disorder. Five of the patients were treated by a 4-day ceremony involving chants but emetics were not employed (this harsh treatment is reserved for adults). One patient was treated by the killing of an animal, as previously described and for one patient the type of ceremony employed is not known.

In addition to this study, as part of a larger study of epilepsy among the Zuni, adults who have had seizures were interviewed and 24 or 25 patients (96%) had seen a native healer for their disorder [22].

For the treatment of epilepsy today, the Shumakk'we are not specifically called upon to see the patients; healers from any of the other fraternities may be seen. In addition, most patients probably come to the hospital for treatment. There may be a few patients who never seek medical care from the

hospital and rely solely upon the *ak'wa:mossi*. More and more this is unlikely as even the native healers may refer patients to the hospital.

Epilepsy is a disease treated by both traditional methods and modern medicine. The traditional methods have undergone changes and modern medicine has made an impact upon the treatment of the disease so that now fewer patients are being brought to the *ak'wa:mossi* for febrile seizures. The greater number of adults who saw the healer for their illness may represent a greater persistence of the traditional ways among the older generation. The younger families are coming to rely more on health care offered by the Indian Health Service. There does not seem to be a conflict between traditional and modern medicine. The patients freely utilize both systems; each seems to offer the patient different aspects of medical care.

#### DIABETES

Diabetes is a prevalent disease among the Zuni, affecting at least 25% of the population over the age of 45 [23]. It is almost exclusively of the adult-onset type. 22 individuals affected by the disease were interviewed by the author to determine their beliefs about their illness and its therapy. The patients ranged in age from 27-80 years and had a median age of 60 years. 13 of the 22 were being treated with insulin; 8 were on oral hypoglycemics and 1 was treated with diet alone. They were scheduled for monthly or semi-monthly appointments at the hospital's Diabetes Clinic where they were seen by one of the physicians. A fasting blood sugar was drawn and the urine was tested. The patients were briefly questioned about any symptoms they might be having and about their compliance with the treatment prescribed. At this time, they might also see a dietician who could explain the importance of diet in the management of their disease.

After these regularly scheduled visits to the clinic, patients were interviewed for this study. Only 3 of the 22 (14%) said that they had seen an *ak'wa:mossi* for their illness. They were 67, 72, and 77 years old. Each of these three had had disease objects removed from their body in a traditional ceremony by the *ak'wa:mossi*. In one case, the *ak'wa:mossi* prescribed a herbal tea to be used. Eight of the 22 patients knew of a plant called "kowahkyatsi" that was supposed to be useful for diabetes and one of these patients (age 57) used the plant when it could be obtained. (The plant is a species of thistle in the genus, *Cirsium*, which is not known to have any therapeutic value. The plant is common throughout Zuni, seen most often growing along the roadsides [24].)

The long tap root of the plant, dug from the ground, is used fresh or stored for winter use. The root is boiled in a pot of water and the "tea" is drunk three times a day to "keep down the sugar". Two of 16 patients (ages 48 and 66) used another herbal medication that was similarly prepared. This plant root was purchased in a shop in Gallup, New Mexico, and is a species of *Glycyrrhiza* related to the plant from which licorice is delivered. The constituent glycyrrhizin contained in the root is extremely sweet [24]. The use of this plant is probably based upon the principle of the doctrine of signatures that states that some quality of a plant suggests its use for a particu-



lar disease. In this case, a sweet plant is used to treat a disease that results in excess sugar in the blood and urine. One other patient (age 66) reports that for his diabetes he drinks a tea prepared from the fruit of the prickly pear cactus.

Patients were questioned about the nature and etiology of diabetes. Seven patients said they did not know about the disease or how it is contracted. Eleven patients related the disease to a problem with sugar or with their diet. Four patients said that diabetes was hereditary. One patient said that diabetes resulted from drinking too much wine; another was told by the *ak'wa:mossi* that it was the result of drinking bad water and attributed his illness to drinking at a spring that had plants growing in it. Three patients who were asked said that diabetes could not result from being witched.

How do the Zuni know if they have the disease? Many (41%) said that the doctor told them. The majority (59%) said that when they first had the illness they did not feel well, that they were drinking or urinating frequently or were tired or dizzy. One person went into diabetic coma and was hospitalized for 2 weeks and another patient describes being so dizzy that he "fell down and had to go to the hospital for insulin".

86% of the patients did not see an *ak'wa:mossi* for this disease and when asked why they had not, several said that this was a disease that the healers did not know about. It had to be treated by the "Anglo" doctors.

In summary, childbirth and diabetes are conditions that are dealt with primarily by the Indian Health Service physicians. Even epilepsy, a disease for which there is a rich array of traditional beliefs and healing practices, is now most often treated at the hospital.

Aspects of traditional care persist for all these conditions, however. The reasons for this may be several: (1) The traditional beliefs about epilepsy and childbirth are still prevalent especially among the elderly. (2) In the case of epilepsy and diabetes, patients may continue to have some symptoms despite modern health care either because of poor compliance with treatment regimens or inadequate therapy. They may seek alternative forms of health care for relief. Of these three conditions, diabetes is most completely treated at the hospital, probably because it is a "new" disease, one that "the medicine men don't know about" as one diabetic patient explained. The disease is new in as much as the symptoms associated with the disease were not given the label "diabetes" and patients were not explained about diabetes until recently. In contrast, epilepsy is an "old" disease, well known to the Zuni for hundreds of years. Diabetes is also a less alarming disease; many patients are symptom-free. Therefore, an extensive folklore with special traditional cures has not developed for this ailment. Patients tend to come to the hospital because the doctors tell them that they have a disease that needs treatment.

#### DISCUSSION

*The interaction between the traditional and the modern practices*

Traditional medicine and modern medicine coexist in Zuni. However, many of the traditional ways are

undergoing changes. The loss of two of the twelve original fraternities is an example of these developments. When the last Zuni in the Cactus and Sword Swallower societies died without initiating new members, those medical fraternities ceased to exist and their unique esoteric knowledge, passed on orally, was largely lost. Although each fraternity practices general medicine and has basic similarities, the medical societies have tended to have a specialty and to utilize different herbal treatments and rituals. The knowledge of the use of certain plant medicines has been lost and this trend is likely to continue.

These changes seem to be the inevitable result of alternations in the Zuni lifestyle. The people have become silversmiths and salaried workers and have lost contact with the land. The vitality of traditional medicine has been profoundly affected by the introduction of modern health care.

Even so, modern medicine has not been totally accepted and it has by no means replaced the traditional system. Adair [1] describes the interaction between the physicians and the medicine men and its evolution. A central theme of Adair's article is the quotation from Ralph Linton, "when a new element is offered to any society, full acceptance is always preceded by a period of trial. During this period both the new trait and the old trait or traits with which it is competing become alternatives within the total culture complex. They are presented to individuals as different means to the same end."

For about a century the Zuni have had both modern and traditional medicine. During this long transition phase, their health care system has been an amalgamation of the old and new ways, easily influenced by the attitudes and practices of both the Zuni and the providers of Western health care. An awareness of this process may enable one to favorably affect the acceptance of modern health care.

At Zuni, one notices that even though a traditional practice is altered by the introduction of a new practice, the beliefs upon which the old practice is based may still persist. For example, antibiotics are accepted by the Zuni for the treatment of infections even though they may believe that witchcraft has caused their illness. The acceptance of modern therapy does not contradict or threaten the belief that the presence of a disease object in the wound has caused the infection. Various studies have shown that modern medicine will be utilized on the basis of its perceived accomplishment though the traditional beliefs are still maintained [2]. As Adair points out, "To tackle head-on the underlying bases for beliefs is often to attack the religion of the people—and thus set Western medicine at loggerheads with the society concerned". Changes in health care practices will be accepted by people and all the more easily if an effort is made not to challenge their cultural and religious beliefs. At Zuni such an effort has been made: (1) *Ak'wa:mossis* are allowed to see patients in the hospital and perform curing ceremonies. (2) Efforts have been made to comply with traditional beliefs. For example, after giving birth, mothers in the hospital are served hot liquids if they so desire. The better informed the health care providers are, concerning traditional beliefs and practices, the better they can provide acceptable medical care.



### *The value of the traditional system*

Traditional medicine continues to be of value to the Zuni for the following reasons:

(1) The *ak'wa:mossi* has a holistic approach to the patient. To the Zuni an illness may not be cured even though the symptoms are alleviated by the physician. Traditional medicine concerns itself with the culturally accepted beliefs of disease etiology and treatment, the folklore, the taboos, and the religion of the Zuni. As long as the culture remains strong, the *ak'wa:mossi* will remain a valuable aspect of the society. Adair, speaking of the nearby Navajo Indians, believes that "the success of modern medicine, of itself, will not replace the cures of the medicine men. They will be practiced as long as the Navaho retain their holistic view of health and disease..." [1].

(2) The *ak'wa:mossi* may be the individual best able to deal with some of the psychological aspects of the patient's illness. The ailing individual is not in harmony with the society. He is unable to perform his usual social role. He often has fears of the outcome of his illness. In the Zuni society, the patient may have fears related to the origin of the illness by sorcery or by breach of some taboo. The patient may have need for emotional support and counselling during his illness. Frank [5] has emphasized the value of non-medical healing. Scientific medicine in his view has failed "to acknowledge that psychological and bodily processes can profoundly affect each other... All illnesses, whatever their bodily components, have implications that may give rise to noxious emotions, raise difficult moral issues, damage the patient's self-esteem, and estrange him from his compatriots... The insensitivity of scientific medicine to the noxious effects of these emotions probably accounts for many of its failures and also impels the ill to seek out forms of healing which operate on a different premise." The therapy of the native healer is an intervention by a representative of the society, the religious structure and the Gods. The role of the *ak'wa:mossi* is to restore the patient's health and in the larger sense restore order to the society. The witch who is believed to have shot the illness into the patient is often felt to be one of society's deviants and the *ak'wa:mossi* can effect a cure. Thus, the illness may affect only the ailing patient, yet its etiology is of concern to the entire society, and it is the *ak'wa:mossi* who acts as the liaison between the society and the patient.

The *ak'wa:mossi* may effectively alleviate the fears of the patient. He makes a diagnosis, he removes the disease objects and predicts the cure of the patient who believes in the *ak'wa:mossi* as an agent of the Gods. The medicine man provides the proper setting in which to receive emotional support; the healing ceremony is attended by the family. The family, the society, and the Gods are all involved in restoring the patient to health. Finally in some cases the *ak'wa:mossi* prescribes certain herbal medications to be prepared and utilized in a specific manner.

In Murphy's studies of the Eskimo shamans of St. Lawrence Island [6], she classifies 7 psychotherapeutic elements of shamanism, many of which are apparent in the *ak'wa:mossi's* curing ceremony; (1) the healer gains the acceptance of the patient by drawing upon widely held cultural beliefs. (2) Through the ritualistic, magical removal of the disease object he

establishes himself as a person of extraordinary powers, derived from the Beast Gods. (3) The curing ceremony involves group participation. (4) A diagnosis is made and (5) a treatment is performed. (6) The patient may be involved in his cure in those cases in which the *ak'wa:mossi* prescribes herbal remedies that the patient must prepare and utilize. Of Murphy's 7 elements only possession by a spirit-familiar is not seen among the Zuni. She concludes that shamanistic curing among the St. Lawrence Eskimos "was a forceful combination of psychotherapeutic techniques, as long as the culture of the group in which it is practiced remained intact." Furthermore, in "terms of the processes and dynamics involved, however, these techniques have far wider generality and are fundamentally similar to the ways of handling psychic and somatic ills of man that have been found effective in modern as well as primitive societies".

(3) Traditional medicine performs useful social functions. This aspect of the medical system is distinct from its therapeutic role. Lieban [2] referring to the work of Davis [25] and Alland [26] points out that traditional systems of medical care contribute to "social control by persuading the individual that his health depends on adherence to norms and on the spiritual forces that symbolize the society and the ritual therapy that invokes these forces". As Alland states, the non-Western medical specialists are "social adjudicators as well as religious functionaries whose duty it is to restore relationships between men or between men and the supernatural".

The medical societies, as a part of a cultural and religious system to which the Zuni adhere, have a considerable influence upon the life of these people. A degree of social conformity is maintained through the beliefs and practices of the *ak'wa:mossi*. For instance, he may attribute the cause of an illness to the transgression of a taboo. The fear of illness thus promotes the adherence to the society's rules. The taboo against touching the sacred *Aneglakya* plant (*Datura innoxia*) or killing an animal while one's wife is pregnant are examples. Failure to abide by these rules may result in specific illnesses.

Similarly the fear of being accused of witchcraft may serve to maintain a degree of conformity among the population; generally only those individuals who are in some way different are accused of being a witch. "Again, no man or woman who is reduced to poverty or has some physical deformity, especially a peculiarity that might be taken for the evil eye, or has made an enemy of a prominent member of the tribe, feels safe from accusation" [14]. In this manner the institution of the medical societies has an influence upon the individual, affecting his beliefs and molding his behavior.

(4) An additional value of traditional medicine is its effectiveness in the eyes of the Zuni patient and his family. They have faith in the traditional system, in part, because it "works". Even if the *ak'wa:mossi's* therapy has no physiological effect, a "cure" may come about for two reasons: (1) Many illnesses are acute self-limited ailments that resolve spontaneously within a few days. The Zuni have many herbal remedies for rashes, sore throats, coughs and stomach aches. If the symptoms of such an ailment subside several days after receiving traditional medical care, a

cause and effect relationship is naturally assumed and the remedy is deemed effective. (2) Similarly, Young speaks of a category of "etiological mistakes" [17]. The patient is assumed to have been affected by a pathological agent when in fact he was not. The therapy that is instituted (before the patient becomes ill) is effective only because the patient was never in danger of becoming ill. Snakebites are an example. It has been estimated that 25% of snakebites do not result in symptoms of envenomation [28]. Yet traditional therapy is likely to be instituted regardless and credit given to its effectiveness.

In another sense Zuni medicine "works" because "an established cure... meets the expectations of the sick person and his kin, that it produces certain results in a predictable way". Furthermore "this is not the same thing as saying that (1) the practices are effective from the standpoint of Western medical notions, or that (2) the practices always bring the results (e.g. remissions of symptoms) for which the people themselves hope" [17]. Zuni traditional medicine continues to be important despite these seemingly considerable limitations because of the Zuni's beliefs concerning disease and his faith in the religious system. For example, a healing ceremony in which disease objects are removed from the patient's body reaffirms the Zuni's belief in disease-object intrusion and in the power derived from the Beast Gods that enables the medicine man to see and remove the objects.

(5) Traditional medical systems are valuable to a culture and persist because they complement modern medicine. Not only does the traditional system deal with psychological and social aspects of illnesses that modern medicine does not, but the traditional system may also be called upon to treat different types of illness. As one Navaho put it: "In sickness that comes from some other causes, like the breaking of a taboo, the pain is not sharp, it is feeling sick. It is such a disease that can best be treated by the medicine man" [1]. Similarly Gould [27] in a study in rural India, found that patients with chronic non-incapacitating illnesses such as rheumatism sought help from healers while those with critical incapacitating illnesses such as pneumonia were taken to the physicians.

The Zuni believe that some diseases are the result of witchcraft that must be cured by the *ak'wa:mossi's* removal of the disease object put there by the witch. Thus in this culture as well, certain categories of disease are considered to require native healers. At the other end of the spectrum are diseases such as diabetes that require care by the physicians.

Finally, Western medicine cannot always cure the patient or fully alleviate his distressing symptoms. Thus, the patient may continue to hope that the *ak'wa:mossi* or another form of medical treatment will be able to improve his health.

#### CONCLUSION

Several practical points, which are applicable to other cultures where modern medicine has been introduced, may be appreciated from this study. The physician should acquaint himself with the native medical practices and beliefs of the people that he treats. With this knowledge trivial modifications of modern health

care practices may be instituted to promote greater compliance with treatment regimens. Snow [4] in her studies of black, Southern white, Puerto Rican American and Mexican-Americans and Aho and Minott [29] working among Creole patients in Trinidad and Tobago give examples of how the physician may make suggestions to patients that fit into their belief system. Knowing that post-partum Zuni women may believe that liquids must be drunk warm, it may be advisable to specifically stress that oral medications may be taken with warm liquids during this period.

To understand the conflicts that may arise with the physician's practices will enable him to better avoid the resistance of the community. Adair [1] mentions that the Navaho object to the collection of urine and feces in their camps because of the fear that they might fall into the hands of witches. Recognizing this, the physician may have to resort to clinic visits for the collection of specimens, a practice which is accepted. Similarly, the physician who is aware of the Zuni belief in contagious magic may ask the patient how he wishes to dispose of a skin tag or birthmark that is removed during a minor surgical procedure or he may explain why a skin biopsy is taken and how the tissue will be utilized. For some patients this respect for traditional beliefs may not only alleviate the patient's fears but also promote the acceptance of modern practices. A patient, didactic and considerate attitude is likely to be successful.

In conclusion, the physician must realize that there is a somewhat precarious trial period during which both traditional and modern medicine are being utilized. During this period the physician should not resist the utilization of traditional medicine. Perhaps it should even be actively encouraged for several reasons: (1) If the patient encounters resistance to his traditional beliefs, he may be less likely to comply with the practices suggested by the physician. (2) The *ak'wa:mossi* may effectively be able to deal with the psychological and social aspects of certain illnesses. His role is able to complement the physician's. (3) Traditional medicine is important to a people as a part of their culture and religious system. It performs useful social functions and the people believe in its effectiveness. The placebo effect of such a system should not be discounted. (4) Traditional practices do not appear to harm the patient or interfere with modern practices. (5) Belief in this system offers the patient hope that his illness can be cured. Since many people may not develop faith in the new system until it is more well established, to undermine the traditional may leave them without faith in any system of health care.

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#### REFERENCES

1. Adair J. Physicians, medicine men and their Navaho patients. In *Man's Image in Medicine and Anthropology* (edited by Galdston I.), p. 237. International Univ., New York, 1963.

2. Lieban, R. W. Traditional medical beliefs and the choice of practitioners in a Philippine city. *Soc. Sci. Med.* **10**, 289, 1976.
3. Whisson M. G. Some aspects of functional disorders among the Kenya Luo. In *Magic, Faith, and Healing: Studies in Primitive Psychiatry Today* (edited by Kiev Ari), p. 283. Free Press, London, 1964.
4. Snow L. F. Folk medical beliefs and their implications for care of patients. *Ann. Int. Med.* **81**, 82, 1974.
5. Frank J. D. *Persuasion and Healing*. Johns Hopkins Univ., Baltimore, 1973.
6. Murphy J. M. Psychotherapeutic aspects of shamanism on St. Lawrence Island, Alaska. In *Magic, Faith, and Healing: Studies in Primitive Psychiatry Today* (edited by Kiev Ari), p. 53. Free Press, London, 1964.
7. Leighton A. and Leighton D. Elements of psychotherapy in Navaho religion. *Psychiatry* **4**, 515, 1941.
8. Weisz J. R. East African medical attitudes. *Soc. Sci. Med.* **6**, 323, 1972.
9. Pillsbury B. "Doing the month": Confinement and convalescence of Chinese women after childbirth. *Soc. Sci. Med.* **12**, 11, 1978.
10. Bunzel R. Introduction of Zuni ceremonialism. *47th Annual Report of the Bureau of American Ethnology*. U.S. Gov't Printing Office, Washington, D.C., 1932.
11. Parsons E. C. Zuni inoculative magic. *Science, New York* **44**, 469, 1916.
12. Parsons E. C. Mothers and childbirth at Zuni, New Mexico. *Man* **19**, 168, 1919.
13. Parsons E. C. Zuni conception and pregnancy beliefs. *Proceedings of the 19th International Congress of Americanists*, 379, 1917.
14. Stevenson M. C. The Zuni Indians. *23rd Annual Report of the Bureau of American Ethnology*. U.S. Gov't Printing Office, Washington, D.C., 1904.
15. Zuni Service Unit Fact Sheet. No date.
16. Lowsayatee A. Personal communication.
17. Young A. Some implications of medical beliefs and practices for social anthropology. *Am. Anthropol.* **78**, 5, 1976.
18. Stevenson M. C. Ethnobotany of the Zuni Indians. *30th Annual Report of the Bureau of American Ethnology*. U.S. Gov't. Printing Office, Washington, D.C., 1915.
19. Fenno J. Childbirth at Zuni. Unpublished observations, 1976.
20. Vicellio A. Medical and social aspects of epilepsy amongst the Zuni Indians. Unpublished observations, 1977.
21. Biro F. Febrile convulsions in Zuni. Unpublished observations, 1978.
22. Gachu S. Personal communication.
23. Long T. P. The prevalence of clinically treated diabetes among Zuni Reservation residents *AJPH* **68**, 901, 1978.
24. Camazine S. M. and Bye R. A. Jr. A study of the medical ethnobotany of the Zuni Indians of New Mexico. *Ethnopharmac.* In press.
25. Davis K. *Human Society*. Macmillan, New York, 1948 and 1949.
26. Alland A. *Adaptation in Cultural Evolution: An Approach to Medical Anthropology*. Columbia Univ. Press, New York, 1970.
27. Gould H. The implications of technological change for folk and scientific medicine. *Am. Anthropol.* **59**, 507, 1957.
28. Wallace J. F. Disorders caused by venoms, bites and stings. In *Harrison's Principles of Internal Medicine* (edited by Thorn G. W. et al.), p. 732. McGraw-Hill New York, 1977.
29. Aho W. and Minott K. Creole and doctor medicine: folk beliefs, practices, and orientations to modern medicine in a rural and an industrial suburban setting in Trinidad and Tobago, the West Indies. *Soc. Sci. Med.* **11**, 349, 1977.

## EDITORIAL COMMENT\*

L'histoire de la psychiatrie, au cours des derniers siècles, pèse lourdement sur son actuel statut.

Le fou a été libéré de ses chaînes pour être traité comme un malade à l'image des autres maladies; c'est-à-dire des maladies du corps dont les modèles-anatomo cliniques, puis étiologiques et physiopathologiques rendaient un compte qui se voulait définitif. Rarement et accessoirement, quelques allusions étaient faites aux facteurs psychologiques ou sociaux.

Aujourd'hui encore, cette image médicale du malade mental détermine les attitudes et le comportement des soignants comme la forme et l'architecture des institutions de soins, asiles, hôpitaux, dispensaires. L'individu, conduit par des circuits d'autorité auxquels il ne peut échapper jusqu'au lieu de "soins", est l'objet d'une attention médicale: pyjama ou uniforme de malade, obligation de rester au lit ou dans sa chambre, prises de sang, examens divers... qui mobilisent inutilement le personnel, entraînent des dépenses considérables, contraignent l'individu et le condamnent au statut de malade.

Or dans la plupart des cas, il n'est pas malade au sens médical du terme. Les examens biologiques seront tous négatifs. Mais ces premiers contacts avec les organismes de soins ne rassurent pas; au contraire ils ne peuvent susciter que suspicion ou révolte. Le "malade" sait bien qu'il y a malentendu et il s'évertue à l'exprimer dans son comportement ou dans son discours; comportement et discours qui restent sans réponse ou qui déterminent une plus grande contrainte à l'endroit du malade. Le désaccord augmente et conduit à un rapport de forces qui dégrade la relation médecin-malade. Le médecin, protégé par le système scientifique et le pouvoir médical, s'en tire au maximum avec un vague malaise dont il ne cherchera pas la cause. Le malade fait tous les frais; les troubles augmentent, la guérison s'éloigne.

Pourquoi en serait-il autrement? Les protestations du malade ne peuvent être reçues. Il s'agit d'un malade mental: ses propos sont incohérents, n'ont pas de sens, ou la seule signification de symptômes qui signent la maladie. S'il y a trop d'agitation, les neuroleptiques la réduiront rapidement; l'inflation des doses assure une réduction rapide des protestations. Le modèle médical, renforcé par les progrès de la psycho-pharmacologie, légitime au regard du médecin l'utilisation du médicament spécifique qui justifie à posteriori la maladie. Les semaines ou les mois passent: le malade s'adapte à la prison hospitalière, il devient tranquille, ses symptômes s'effacent et un jour il sort. Il sort apparemment guéri, guéri parce que son comportement s'est normalisé en ce sens qu'il n'engage pas de polémique avec son entourage, compagnons de chambre ou personnel soignant.

Il sort et, toujours selon le modèle médical, la maladie est terminée; la plupart des maladies ont une fin heureuse ou malheureuse. Généralement une prescription de neuroleptiques ou d'antidépresseurs à doses réduites rassure le personnel soignant.

Où va le malade et que va-t-il retrouver? Cette question n'est généralement pas posée puisque la sortie de l'hôpital équivaut à la guérison. Il n'est pas question de s'en occuper, encore moins question de s'occuper de son environnement, de sa personne ou de ses problèmes, comme il n'a pas été question d'élucider les causes ou la série de facteurs qui ont déterminé sa mise sur le circuit de soins.

Si son hospitalisation n'a pas augmenté ses troubles, le désaccord entre lui et les autres, ou, pour parler médicalement, aggravé sa maladie au point de la rendre chronique et difficile à guérir... il reviendra au même endroit ou dans d'autres endroits identiques. La ronde hospitalière l'enfermera dans son statut de malade. Dans les pays occidentaux le système d'assistance sociale fera de lui un invalide à qui sera attribuée une pension. Désormais le cycle est achevé, le statut de malade est pérennisé. Les neuroleptiques et la pension consacrent la détérioration progressive.

Le modèle médical et les circuits de soins, l'assistance sociale médicalisée, ont rempli leur fonction.

Le modèle médical secrète son propre langage: symptômes, syndrome, maladie, thérapeutique, médicaments. La parole de l'autre non malade (médecin ou non) utilise ce langage pour définir l'individu malade qui devient ainsi le délirant chronique, le schizophrène, le psychopathe. Il n'est plus question d'un individu avec son histoire, son milieu, ses problèmes, son devenir et ses projets, mais d'un objet maladie. Puissance des mots qui font de la réalité, c'est-à-dire de l'être sensible, existant dans des relations difficiles au monde et aux autres, un sujet mort transformé en cette abstraction qui a nom schizophrénie ou autre étiquette. Le rapport qui pourrait s'établir avec les autres sera toujours entravé sinon rendu impossible par les mots qui désignent la maladie. Lit d'hôpital anonyme, étiquette anonyme, assistance retranchée derrière l'anonymat du médicament, interdisent toute évolution vers ce qui serait la guérison c'est-à-dire l'homme achevé, intégré dans son milieu et heureux de l'être.

Que le modèle médical s'applique efficacement (plus ou moins) au niveau biologique de l'organisation humaine, personne ne le contestera sérieusement. Encore qu'il soit difficile de séparer chez un individu les différents niveaux ou systèmes d'organisation lorsqu'il s'agit de comprendre ses difficultés qui s'exprimeront tantôt au niveau du corps, tantôt au niveau des conduites ou du vécu. L'important lorsque l'on considère ou lorsque l'on utilise le modèle médical, c'est d'en connaître les limites.

Or précisément, du fait des conquêtes technologiques de la médecine ou pour d'autres raisons, ce modèle envahit la totalité du champ de la médecine, en particulier le champ de la psychiatrie. L'histoire à court terme

[\* This editorial was the last contribution by Henri Collomb before his death in 1979—Ed.]



clame les succès des neuroleptiques. L'histoire à plus long terme saura faire le procès de la déviation dont ils sont responsables.

Depuis quelques décennies les services de psychiatrie ont été intégrés dans les hôpitaux généraux. L'intention qui a déterminé ce mouvement était motivée par le souci de ne pas différencier les malades mentaux des autres malades. C'est ainsi que les services de psychiatrie ont été soumis aux mêmes règles administratives sans que pour cela le règlement plus contraignant, appliqué à ces services, ne soit en rien modifié. Double contrainte qui limite encore la liberté et méconnaît les besoins spécifiques de ces services; il en résulte l'assimilation des malades mentaux aux malades organiques pour lesquels le lit, ou à la rigueur la chambre, est le seul espace de vie et de socialisation. L'obligation de rentabilité administrative et les demandes d'hospitalisation de plus en plus nombreuses aboutissent au confinement, à l'inaction, sources de mal être, d'agitation et d'angoisse. Le malade, comme l'animal dans sa cage, tourne en rond, se frottant douloureusement aux autres malades et au personnel soignant.

Intégrer le service de psychiatrie dans un hôpital général peut se concevoir dans deux conditions:

- hospitalisations courtes pour quelques jours de soins intensifs;
- dispositions particulières au lieu psychiatrique pour ce qui concerne l'espace, la socialisation, les occupations et les diverses activités.

Il faut constater que dans la majorité des cas, ces conditions ne sont pas remplies et que la proximité des autres services ne fait que renforcer l'application du modèle médical.

Si le modèle médical envahit avec autant de force et de succès le champ de la psychiatrie, c'est qu'il doit satisfaire une demande: demande qu'il faut tenter d'élucider en éclairant les avantages et non plus les inconvénients. Le besoin fondamental d'ordonner, de se représenter la "réalité" aboutit au modèle qui explique, permet de comprendre, d'agir et de prévoir. Le modèle est une construction provisoire, déterminé par le type de rapport de l'homme à son milieu: il est susceptible de variation selon le temps et l'espace géographique, les connaissances techniques.

Le modèle médical peut être considéré comme relativement spécifique des cultures occidentales. Les autres cultures ont élaboré d'autres modèles pour rendre compte de la maladie physique, psychosomatique ou psychique.

La validité d'un modèle se mesure, en particulier, à son efficacité opératoire. Appliqué à la maladie mentale, le modèle médical n'est pas fondé par son efficacité mesurée aux succès thérapeutiques. Ses avantages sont ailleurs.

Le premier tient au fait que le psychiatre est médecin et qu'il ne peut abandonner son pouvoir médical sans être mis en question dans son statut. L'indépendance de la psychiatrie par rapport à la médecine générale lui poserait certains problèmes, en particulier celui de ce savoir que lui ont conféré des années d'études dogmatiques. L'enseignement de la médecine est généralement conçu comme distribution d'une vérité qui se veut absolue. Le maître sait, sa parole n'est pas discutée. L'histoire de la médecine enseigne cependant que les vérités d'un jour seront reconnues erreurs le lendemain, que les conceptions changent... mais, et c'est là le propre de l'enseignement médical, le maître ne saurait se tromper. La hiérarchie impose le savoir: l'ordre médical est le prototype de l'ordre hiérarchique. Ses rites quotidiens sont là pour l'attester et le répéter. On pourrait se demander si la fonction de ces rites n'est pas de faire croire, précisément parce que la vérité n'est pas évidente et que le doute ne serait pas supportable. Quoiqu'il en soit, le médecin nourri de science et de hiérarchie médicale n'est pas préparé à se mettre en question. Le modèle médical le renforce dans son attitude et lui évite l'angoisse du doute.

Le deuxième avantage est plus général en ce sens qu'il intéresse tout le monde. Réduire la folie à la maladie c'est supprimer la folie en tant qu'objet de scandale. C'est éviter de reconnaître à la folie sa dimension humaine, ce qui la rendrait insupportable. C'est aussi mettre entre l'homme normal et le malade mental la science médicale, écran qui évite le face à face intolérable. La folie questionne douloureusement l'homme dit normal, soumis aux contraintes sociales. Elle est émergence d'une autre vérité plus réelle que la réalité reconnue par les autres, imposée par l'ordre social. Elle est aussi liberté, liberté absolue qui refuse l'ordre social. D'où sa fascination et la peur qu'elle inspire. L'individu comme la société ont la nécessité de se protéger contre ce danger qui mettrait en péril l'un et l'autre. Le modèle médical en réduisant la folie au silence des symptômes lui enlève toute signification. Le fou est un insensé; son discours et son comportement ne sauraient avoir de sens; ce qui est dit ou fait ou perçu ou éprouvé n'est que la conséquence de la maladie qui détruit les fonctions spécifiques de l'homme. Cela rassure et évite le dialogue, sinon l'écoute.

Soumission au pouvoir médical, hantise de la folie, expliquent la fortune du modèle médical dans le champ de la psychiatrie.

Quelques considérations simples invitent à situer la pathologie mentale dans le champ social.

La première est d'ordre essentiellement pratique. En faisant abstraction de ce qui a pu conduire un individu à la maladie mentale, il faut reconnaître que le devenir de cet individu (et de sa maladie) dépend étroitement du milieu social, de ses valeurs, des données culturelles. S'il est reconnu par la société comme aliéné et traité comme tel il sera rejeté, condamné définitivement à être malade, inutile dangereux. La ségrégation dont il sera l'objet ne peut que le séparer de plus en plus du milieu social et la seule solution pour lui est d'accepter ce qui lui est proposé, à savoir la marque définitive de la folie. Il s'en suit une aggravation progressive des troubles; c'est ce qui était observé dans les asiles et décrit comme "évolution naturelle" dans les anciens traités de psychiatrie. Les sociétés technologiques n'offrent aucun choix; il n'y a pas de place pour le déviant.

Au contraire si l'expérience initiale de la folie, quelles que soient les voies qui y conduisent, est considérée comme expérience existentielle qui menace tout être humain parce que tout être humain contient la folie, les

attitudes et les comportements à l'égard du "malade" seront différents. L'assistance dans l'épreuve remplacera le rejet et l'isolement. Dans les cultures traditionnellement non technologiques, les cultures africaines en particulier, le malade mental a encore cette place privilégiée; il fait encore partie du groupe à part entière. Reconnaître le malade comme personne non différente des autres quant à l'essentiel, c'est aussi lui reconnaître une liberté et une existence sociale. Ce n'est plus l'aliéné au sens classique du terme, mais un être sujet qui vit une expérience particulièrement intéressante la communauté. Dans ces conditions l'expérience qui le singularise a toutes les chances d'évoluer; le changement qui conduit à la guérison reste possible. C'est pour cela que dans les sociétés africaines traditionnelles les maladies mentales chroniques (du type psychose chronique) étaient rares ou pratiquement inconnues; le type même de la maladie mentale était la bouffée délirante.

Quelle que soit la position théorique quant à la genèse de la maladie mentale, il apparaît que son évolution vers la chronicité ou la guérison dépend de l'attitude et du comportement des autres à l'endroit du malade.

Cette conclusion peut paraître un peu simpliste. Elle semble ignorer les techniques de soins administrés par des spécialistes de la santé mentale. Cependant elle se vérifie dans la réalité quotidienne. Par ailleurs l'utilité des spécialistes et de leurs techniques, face à cette autre réalité plus déterminante qui est le renfermement et le rejet, n'a-t-elle pas été mise en question et cela de tout temps?

La deuxième considération est d'ordre plus théorique. Elle met en question le concept de maladie mentale en tant que maladie médicale. Il suffira de remarquer que l'homme ne naît pas homme, porteur d'un déterminisme qui le fera adulte intégré dans la société à l'image du déterminisme biologique qui fixe les limites de l'espèce. L'homme devient homme, intégré dans la vie sociale, avec l'aide de son milieu ou sous la contrainte de ce milieu. Les échecs, c'est-à-dire la maladie ou la déviance, seront déterminés par l'environnement social. Il n'est pas question de nier l'importance des premières relations de l'enfant, le rôle de la mère et le rôle du triangle oedipien en particulier, mais d'en réduire le déterminisme trop rigoureux. De toute façon, les parents sont aussi façonnés par leur expérience historique du milieu et se comportent, dans l'ici maintenant, selon les normes et les valeurs du milieu social. La maladie mentale devient dans sa genèse et son devenir une maladie sociale.

Une troisième considération plus philosophique, nous est proposée par les cultures traditionnelles africaines et par certains mouvements anti-psychiatriques.

Dans les cultures africaines il est reconnu, comme évidence, que tout individu peut être victime des forces d'agression, symboliquement ou imaginativement (imaginaire collectif), véhiculées par un homme vivant (le sorcier anthropophage) ou par un esprit (esprit des ancêtres ou esprit religieux). La mise en forme socialisée des deux types de situation conflictuelle que tout homme rencontre nécessairement (à savoir conflit avec l'autre qui s'origine dans la relation mère-enfant et conflit avec l'ordre social) se traduit par les représentations traditionnelles des maladies mentales. Cette mise en forme, en situant l'agresseur hors l'individu ou la famille, déculpabilise le malade et, en même temps, implique le groupe ou la communauté. La maladie de l'individu n'est alors que la conséquence d'un désordre social ou d'une façon plus précise, le résultat des forces agressives développées dans la communauté: la maladie est un fait social; son traitement ne peut être que social, c'est-à-dire qu'il doit nécessairement faire intervenir la communauté sous des formes diversifiées (participation active ou symbolique).

L'anti-psychiatrie dans ses formes extrêmes pose la maladie comme résultant de l'action de la société sur l'individu: c'est la société aliénante qui aliène l'individu. Ce qui est mis en cause ici, c'est le type même des sociétés occidentales qui valorisent l'avoir et le profit aux dépens de l'être. Ce qui signifierait que dans d'autres sociétés, aux valeurs différentes, la maladie mentale, tout au moins dans sa forme grave chronique, n'existerait pas. Dans une certaine mesure ce fait est vérifié pour les sociétés dans lesquelles la solidarité prime sur la contrainte. Ce n'est pas le cas des sociétés industrielles technologiquement développées.

Le rapport individu société organise l'être humain en exerçant obligatoirement une action contraignante sur l'individu. Le premier mot que prononce l'enfant est "non". Quel que soit le type de société, l'homme sera toujours en position de conflit. On peut donc supposer que la folie, résultat de ce conflit, est une dimension anthropologique fondamentale; elle est caractéristique de l'homme, qu'elle reste à l'état potentiel ou qu'elle s'actualise par des comportements déviants. On pourrait alors définir la folie comme cette part de l'individu qui résiste à la socialisation; part que tout le monde possède à des degrés divers en fonction de l'action érosive de l'ordre social.

Considérer la folie comme maladie sociale implique, par rapport au modèle médical, un changement radical. Le regard n'est plus le même; il éclaire le phénomène de toute autre façon.

Dans sa forme caricaturale, mais cependant habituelle, la maladie est atteinte d'un organe ou d'une fonction: un foie, un poumon, un coeur, le cerveau pour la psychose, etc... De l'homme il n'est pas question. Dans une conception moins mécaniste, l'homme sera reconnu avant ou en même temps que l'organe malade. Mais il reste qu'il s'agit toujours de l'individu malade. Intégrer l'environnement social et lui donner la priorité, sinon la seule responsabilité, pour ce qui concerne la maladie mentale exige une véritable mutation qui, au-delà des mots, modifie fondamentalement la perception et l'approche des phénomènes. Mais la mutation n'est pas facile, surtout pour ceux qui ont subi la formation médicale. Une meilleure préparation serait sans aucun doute l'étude des sciences humaines.

Dans la pratique quotidienne l'homme malade est alors saisi comme symptôme de son environnement. Ce qui est questionné ce ne sont plus les signes psychiques ou psychosomatiques, mais, au-delà de l'individu, le milieu dans lequel il vit ici maintenant et le milieu qui l'a constitué. Le lieu de la maladie se déplace à l'extérieur de l'individu malade. On rejoint ici les conceptions traditionnelles de cultures africaines qui font de la maladie une agression par des forces humaines ou spirituelles extérieures à l'homme malade.

Si le lieu de la maladie est déplacé, le lieu thérapeutique doit l'être aussi. Il ne s'agit plus de considérer le seul

traitement chimiothérapique ou même le seul traitement psychologique (même dans son intensité analytique) mais d'intervenir sur l'environnement ou de constituer un environnement propre au changement, à l'évolution du malade vers ce qui est appelé guérison parce qu'intégration sans trop de souffrance dans la société. Cela signifie en particulier qu'il n'est pas possible d'être thérapeute en écartant la famille, les proches, amis ou employeurs, en n'accordant pas une priorité au cadre de soins qui est l'environnement social du malade pendant le temps d'hospitalisation ou de vie en institution. Les guérisseurs africains avaient, consciemment ou spontanément comme chose allant de soi, reconstitué un environnement social à la fois sécurisant et tolérant, suscitant le changement et l'évolution vers la guérison en réalisant de véritables villages thérapeutiques.

Qu'il me soit permis une dernière réflexion. En Europe les institutions soignantes, hôpitaux psychiatriques, services de psychiatrie dans les hôpitaux généraux... ont pour fonction de normaliser les comportements des malades, sans y réussir souvent. L'intention thérapeutique exprimée à chaque niveau de soins est de restituer l'individu—malade ou marginal—à la société alors que cet individu est malade précisément parce qu'il a refusé la société. Le soignant n'appartient pas à la marginalité; il appartient à la majorité, il est du côté de ceux qui ont choisi la raison contre la folie. C'est tout du moins la règle générale. Peut-il dans cette position aider le marginal (c'est-à-dire le malade mental) à réintégrer la société?

La question ainsi posée pourrait se formuler différemment. La maladie mentale ou la marginalité sont des modes d'existence opposés, dangereusement, au mode d'existence reconnu comme valable par la société. Il s'agit pour le thérapeute d'opérer une réconciliation. S'il appartient à l'un ou l'autre parti, lui est-il possible d'être neutre pour être le bon médiateur, c'est-à-dire le bon thérapeute?

Mais peut-on à la fois accepter les deux situations, celle de l'ordre social et celle de la folie; être à la fois intégré et marginal? Là encore, les cultures africaines avaient trouvé la solution. Le guérisseur était à la fois:

—l'être marginal parce qu'il avait généralement fait l'expérience initiatique de la maladie mentale et parce qu'il avait accès aux forces spirituelles ou humaines qui échappaient aux autres;

—l'être intégré dans la communauté qui lui reconnaissait un statut et un rôle des plus utiles.

Les philosophies ou les cosmogonies africaines permettaient le dépassement de la contradiction inhérente au thérapeute occidental.

H. COLLOMB✠

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## OBITUARY

### HENRI COLLOMB (1913-1979) ET L'EQUIPE DE FANN

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Nous ne verrons donc plus sa silhouette râblée, ses blancs cheveux, son visage enluminé. Il est retourné au petit village alpin où il est né. On l'appelait le maître de l'Ecole de Dakar. Au fond, il était aventurier: de la rencontre, de l'altérité. Son déroutant appétit de la différence—des hommes, des femmes, des cultures—ne cessait d'aiguillonner sa vie et sa pensée. Pionnier, il travaillait dans la plaisir de la conquête. Fondateur, il ignorait le repos des certitudes. Il ne finissait pas de s'étonner de l'Afrique, de la diversité et de la vigueur de ses arts de vivre en société. De question en interrogation, sa secrète inquiétude le propulsait vers des horizons inaccessibles aux sédentaires du cœur et de l'esprit. Dans cette quête soutenue par une prodigieuse vitalité, deux boucliers: sa solide constitution paysanne et son inoubliable générosité. Le patron latin—qui aimait s'entourer de ses clients—se doublait en lui d'un Ceresus africain qui savait tout donner: gîte et couvert, idées à profusion, avenir, goût de vivre. Mais, son don le plus précieux était sa présence intense, inexplicable, charismatique qui valait question: voici mon destin, quel est le tien? Les Sénégalais, qu'il a touchés au vif de leurs souffrances et au cœur de leur sociabilité, ne s'y sont pas trompés. C'est le *Soleil* de Dakar qui titre au lendemain de sa mort: "De tels hommes sont des énigmes". En effet.

Dans les annales de la psychiatrie transculturelle, son nom restera attaché à une institution, la Clinique neuro-psychiatrique de Fann, qu'il a animée pendant vingt années décisives pour la constitution de la psychiatrie africaine. Aucune autre institution du continent—pas même les organismes nigériens mis en place par T. A. Lambo—n'a formé autant de praticiens africains qualifiés et n'a produit des travaux aussi nombreux, novateurs et variés que cet atelier fondé en 1959 sur les ruines des structures asilaires héritées de l'époque coloniale.

Il fallait d'abord réunir les conditions élémentaires de l'échange de paroles: ouvrir les portes et créer la confiance là où régnaient la routine du gardiennage et le silence de l'enfermement. Malgré la réticence des autorités et les sarcasmes de la bourgeoisie française ou locale, H. Collomb y réussit au point qu'il s'ensuivit un véritable raz de marée de la demande de soins. Dès cette époque, la figure du "Docteur de Fann"—aussi familièrement ambiguë que certaines figures de thérapeute locales, aussi étrangement rassurante que certains personnages paternels de l'ère coloniale—devint populaire dans tout le Sénégal. Ce guérisseur désintéressé qui passait ses dimanches à l'hôpital, ce patron français qui disposait des moyens prestigieux des toubabs (des blancs) et qui reconnaissait pourtant le pouvoir des chasseurs de sorcières et des *rab*, ce médecin blanc qui écoutait et entendait ses malades noirs, offrait l'image séduisante et inattendue d'une sorte d'*ombudsman* post-colonial.

Il fallait mesurer ensuite l'ampleur de la tâche et surtout l'étendue des ignorances. La plupart des prati-

ciens d'alors étaient européens. Comment comprendre le malade lorsqu'on connaît si mal la définition et le destin de l'individu normal, les étapes de son développement psychologique, les modalités fines de son insertion familiale ou sociale, sa religion vivante, les traditions et les valeurs actives qui la rivent à son groupe ou qui l'en éloignent? Comment l'entendre dans le dialogue clinique lorsqu'on ne dispose pas des repères quotidiens de sa culture? Comment prétendre à le soigner lorsqu'on ignore la substance et la logique de ses représentations de la maladie? Comment répondre à sa demande thérapeutique lorsqu'on n'a qu'une connaissance anecdotique des cures magico-religieuses qu'il pratique avant, pendant et après son traitement psychiatrique? Toutes ces ignorances—et j'en passe—ne pouvaient pas être levées par les praticiens submergés par les tâches d'assistance et peu préparés aux sciences sociales. Une équipe de recherche—cadre pour la formation des futurs psychiatres africains—fut constituée et intégrée au service en 1962.

Stimulée par les énigmes quotidiens de la clinique, intriguée par l'écheveau des conjonctures individuelles et des données culturelles, nourrie par les intuitions de H. Collomb, cette équipe—composée de psychiatres, de psychanalystes, de psychologues et d'ethnosociologues—étendit rapidement ses recherches et connut les joies de la découverte dans un domaine alors pratiquement vierge. L'originalité—et la difficulté—de l'entreprise résidait dans l'articulation des données obtenues, en des points d'observation délibérément multipliés, par la méthode clinique et par l'approche ethnosociologique. En ethnographie, c'est la demande de l'enquêteur, en clinique c'est la demande du patient qui structure les entretiens. On ne peut à la fois écouter le sujet et l'interroger sur les "faits" de sa culture. Comment conjuguer ces deux approches constitutives de la psychiatrie transculturelle? [1].

Une consultation de psychologie clinique fut ouverte tant pour accueillir les jeunes confrontés à des difficultés scolaires que pour explorer la zone des névroses et des troubles mineurs dont la connaissance était l'une des conditions de l'approche théorique des structures normales et pathologiques. Les riches matériaux issus de cette consultation—et synthétisés par la suite dans l'ouvrage de M. C. et E. Ortigues, *Oedipe Africain* [2]—furent élaborés sous l'éclairage des observations et des faits culturels rapportés par les recherches que S. Valantin et J. Rabain menaient, simultanément, sur le développement de l'enfant wolof en milieu rural et urbain. Ces recherches—qui devaient aboutir à une série de publications [3], dont *L'enfant du lignage* de J. Rabain [4]—bénéficièrent, à leur tour, du *feedback* de l'expérience clinique qui leur apprenait à reconnaître les positions variables des sujets face aux référents relativement constants de leur culture.



Un échange similaire s'engagea entre les recherches citées, la clinique psychiatrique de tous les jours et l'enquête ethnographique que je conduisais, en milieu wolof, sur les modes d'interprétation et les cures "traditionnelles" des désordres mentaux [5]. Au fil de mes découvertes, je communiquais aux cliniciens les rudiments de la symptomatologie wolof, le lexique et la logique des étologies socio-religieuses, le déroulement, la structure et les fonctions sociales des cures évoquées ou pratiquées par leurs malades. En contrepartie, la clinique m'apprenait les règles de covariation des conjonctures subjectives et des interprétations persécutives et elle me permit de comprendre la syntaxe de leurs transformations au cours des épisodes de maladie.

Qu'elles s'en défendissent ou non, certaines de ces recherches furent cependant hantées par l'idéologie coloniale de l'immobilité des sociétés "traditionnelles" et par les effets dogmatisants propres au structuralisme et à la philosophie française du sujet. Ces tendances—inséparables des ambitions théoriciennes pointées vers la scène intellectuelle "métropolitaine"—trouvèrent leur contrepoids dans les premiers travaux des psychiatres africains—notamment du regretté M. Diop [6]—et dans une série de recherches appliquées sur des problèmes parapsychiatriques prioritaires comme l'entrée à l'école ou les problèmes scolaires—si révélateurs des effets du changement socio-culturel—la transformation de l'autorité parentale, la toxicomanie, la délinquance juvénile... [7]. Par ailleurs, les enquêtes familiales que D. Storper-Perez entreprit à partir des malades hospitalisés à Fann lui permirent de montrer—dans *La Folie colonisée* [8]—l'effritement des représentations et des attitudes traditionnelles en milieu citadin et d'engager le procès de la psychiatrie sous l'angle de sa connivence supposée avec l'oppression néo-colonialiste.

Si l'on ajoute à toutes ces approches—psychiatrique, psychanalytique, psychologique, ethnographique, sociologique ou psycho-sociale—les sondages statistiques (nosographiques) effectués à l'hôpital et, *last but not least*, les recherches épidémiologiques engagées par J. L. Ravel et M. Beiser dans un arrondissement rural [9], on a le tableau approximatif des multiples méthodes et points de vue expérimentés, parfois confrontés, en vingt ans, à Fann. Promoteur de ce pluralisme, H. Collomb en était aussi le garant. Allergique à l'acrimonie des dogmes ou des systèmes, il aimait la ferveur des entreprises nouvelles.

Les travaux que je viens de citer ne constituaient cependant que les racines adventives du rhizome implanté à Fann: de la clinique psychiatrique vouée à la compréhension et au soin des malades. La métaphore paraîtra peut-être plus convaincante si je rappelle ici que le renouvellement fréquent—et donc la formation—du personnel, notamment européen, était une des préoccupations constantes du Pr Collomb que je compare en l'occurrence au planteur de pommes de terre. Après chaque saison—caractérisée par son climat tant affectif qu'intellectuel—il s'ingénia à assortir les éléments nouveaux avec les fragments du bulbe ancien pour planter ce qui devait pousser en tubercule de la saison suivante. Dans cette tâche délicate, où il fallait compter avec les intérêts, le poids, les désirs d'individus fort différents mais tous impliqués dans le

contact éprouvant de l'altérité, le Dr J. P. Moreigne lui apportait, de façon répétée, le concours décisif de son expérience et de son amitié. P. Martino, M. Diop, F. Moreigne, D. Bartoli, R. Auguin, N. Le Guérinel, M. Boussat, R. Collignon, B. Diop et beaucoup d'autres que je ne puis nommer ici l'ont également soutenu—chacun en son temps et à sa manière—de leur intelligence et de leur attachement. Si Fann n'a peut-être pas été une école de pensée—comme le nomment certains de ses commentateurs—il a assurément été une communauté; permanente malgré ses changements, irréductible à la somme de ses éléments.

Si H. Collomb désirait que le rhizome en question poussât ses racines dans tous les sens susceptibles de s'imprimer sur le non-sens apparent de la folie, c'est, entre autres, parce qu'il souhaitait que cette communauté de médecins, de chercheurs et d'infirmiers se transformât aussi en communauté thérapeutique irriguée par la force des idées, de l'expérience et des traditions du pays. Son souhait se renforçait ici d'un principe qui réapparaît dans toute son oeuvre tantôt comme inférence tantôt comme axiome: l'interdépendance prononcée, voire la fusion de l'individu et du groupe africains. Dans sa conception, la symbiose prolongée entre la mère et l'enfant (wolof), la force intégratrice de la famille sénégalaise, la réactivité aiguë et souvent psychotique au conflit avec le groupe, la réversibilité des psychoses réactionnelles, notamment des bouffées délirantes [10], sous l'effet réintégré des cures traditionnelles, la rareté de la schizophrénie en milieu rural, la fréquence élevée des délires de persécution... sont autant de phénomènes articulables au moyen d'une théorie socio-psychosomatique de l'*ethos* communautaire. Si donc la désagrégation, les conflits, les tensions du groupe africain sont particulièrement iatrogènes pour un individu "fondu dans la pâte communautaire" [11], l'être-là de ce groupe, ses transactions verbales et corporelles, ses démarches symbolico-rituelles et ses efforts réguliers pour reconquérir sa cohésion et son harmonie peuvent exercer des effets restructurants, insoupçonnés en Occident, sur le même individu: schématisée à l'extrême voilà l'idée générale qui guidait les aménagements institutionnels par lesquels H. Collomb s'efforçait de donner corps à sa tenace hypothèse du groupe guérisseur.

Parallèlement aux efforts courants de réinsertion des malades dans leur milieu familial, la pratique du *pënc* (palabre villageoise) fut instituée dans les différents services de Fann. Amener les uns et les autres à parler, mettre en paroles communes les aléas de la vie quotidienne des malades, reformuler les problèmes individuels en termes communautaires, être-là au vu et au su de tous, tels étaient les buts déclarés de ces longues réunions qui rassemblaient malades, médecins et infirmiers sous l'autorité fictive du *jaraaf* (chef de village), modérateur élu parmi les pensionnaires. La libre circulation des personnes et des biens entre la ville et l'hôpital—à laquelle H. Collomb tenait beaucoup et malgré la réticence des autorités de la capitale—la pratique régulière de l'admission d'un accompagnant (parent ou ami) du malade, des mesures plus classiques comme l'organisation de danses traditionnelles ou de fêtes, contribuaient à revigorer une vie sociale en perpétuelle convalescence.

H. Collomb comprit rapidement l'entropie inéluctable de ce système institutionnel et ne tarda pas à aller plus loin. Il savait notamment qu'à la tombée du crépuscule les guérisseurs arrivaient à l'hôpital et que leurs consultations animaient la vie nocturne de Fann. Il tenta de les intégrer dans la *pënc* et aussi de les associer aux soins officiellement dispensés aux malades. A mon avis, ses tentatives antérieures qui consistaient à maintenir des relations étonnamment intenses et amicales avec quelques chasseurs de sorciers, marabouts ou *ndappkat* de manière à échanger périodiquement leurs expériences et leurs malades apportaient davantage de bénéfices à ceux-ci. En médecine traditionnelle, la guérison des maux de l'individu passe fréquemment par le traitement approprié de la texture relationnelle du groupe dont il fait partie. Cela, H. Collomb le savait bien. Mais, il a manifestement oublié l'enseignement des recherches ethno-sociologiques, à savoir que l'impossibilité de ce traitement du groupe est bien souvent le motif même de l'hospitalisation. Il semble avoir également oublié que l'une des conditions de l'efficacité du guérisseur est sa liberté de manoeuvre dans un espace socio-religieux autonome où s'engendre, tant bien que mal, le consensus qui soutient, pour ne pas dire constitue, son pouvoir, son savoir et son action. Que cette liberté, cet espace et ce consensus, essentiels à sa cure, sont irréalisables dans la situation de dépendance paramédicale. A vouloir transformer les guérisseurs en "psychiatres traditionnels", ne risquait-il pas de leur couper l'herbe de la croyance sous les pieds?

Quoi qu'il en soit, quelque quinze ans avant la campagne actuelle de l'O.M.S. et vers la même époque que son pair anglophone, le psychiatre nigérian T. A. Lambo, H. Collomb s'essayait déjà à intégrer les thérapeutes traditionnels dans le système officiel de soins. Et lorsqu'il constata le maigre rendement des "psychiatres traditionnels" attachés à l'hôpital ainsi que l'échec relatif des aménagements institutionnels de Fann, il se tourna—at avec lui, une partie de l'équipe—vers une mise en question plus radicale de l'institution psychiatrique. Certes, il n'a jamais envisagé de fermer Fann et son annexe quelque peu asilaire située à Thiaroye, à proximité de Dakar. Administrativement, il n'en avait pas le pouvoir. Mais, il décida de sortir de l'hôpital et de transplanter quelques racines du rhizome dans le sol humain plus fertile et stable des communautés rurales. Ce fut l'époque, relativement récente, des recherches épidémiologiques dans l'arrondissement serer de Niakhar (Sine) et surtout de la création des villages si peu "psychiatriques" de Kénia (Casamance) et de Botou (Sénégal Oriental), puis du projet DIAMM. Ce sont les communautés thérapeutiques de l'Afrique des guérisseurs (Maoua au Sénégal, Bregbo en Côte d'Ivoire) [12] et aussi les anciennes expériences nigérianes (Abéokouta) qui inspiraient H. Collomb lorsqu'il cherchait à aménager Kénia et Botou en sollicitant au maximum la participation du milieu rural local et en réduisant au strict minimum le dispositif biomédical. Pour une fois, il entrevoyait la réunion des trois principes de base de sa vision thérapeutique: le maintien du malade dans son milieu physique et socio-symbolique, le concours efficace des thérapeutes du pays, la vie de groupe qui guérit [13]. Aussi tenait-il beaucoup à ces villages où il passait, au travail, ses fins de semaine.

Comme tant de ses proches, je ne pourrai oublier son irrépressible tension vers l'autre, ses fortes intuitions et sa vivifiante alacrité au cours de ces dimanches communautaires. Toujours heureux en brousse, l'inépuisable docteur retrouvait ici les traces du paysan guéri.

Mais, il n'a pas fini ses jours, comme il en a plus d'une fois exprimé le désir, à proximité de la brousse africaine. C'est le moment pénible de ne rien cacher de son drame personnel. A force de s'attacher à une Afrique chaleureuse et colorée, il se détachait de la grisaille de son pays natal. A force d'innover, il se rendait suspect aux yeux du monde médical. A force de regarder l'avenir du Sénégal, il a sous-estimé son implacable héritage colonial. A force de traquer l'autre, il ne se retrouvait pas. Non pas, bien sûr, qu'il manquât d'amis et de relations ou qu'il ne songeât pas à préparer la relève de l'équipe européenne et sa propre succession.

Dès son arrivée au Sénégal, il comprit que l'histoire lui commandait de céder, tôt ou tard, sa place et que la formation de psychiatres africains était une de ses tâches prioritaires. La chronique de Fann en témoigne. Avant 1965, H. Collomb se contente de faciliter les études de quelques étudiants dans les universités européennes. En 1965, il crée—en même temps que la Société de Psychopathologie et d'Hygiène Mentale de Dakar et la revue *Psychopathologie Africaine*—le Certificat d'Etudes Spéciales (C.E.S.) de neuro-psychiatrie de l'Université de Dakar. Une dizaine de candidats—intégrés, par ailleurs, dans l'équipe de Fann—sont reçus, entre 1965 et 1971, à ce certificat, le premier de son genre en Afrique Noire francophone. En 1968, Collomb sépare neurologie et psychiatrie et, vers la même époque, il renonce à une carrière personnelle fort prometteuse en neurologie. Il transforme le cycle précédent en C.E.S. de Psychiatrie: quatre années de formation assurée, pour une bonne part, par les praticiens et chercheurs de Fann. Enfin, en 1972, il ajoute à ce dispositif l'Internat en Psychiatrie des Hôpitaux de Dakar. Dans toutes ces institutions et pendant toutes ces années, il enseigne, il aplanit les difficultés des uns et des autres, il suscite les vocations de par sa personnalité hors commun. En fait, il forme et il installe toute une génération de jeunes psychiatres africains au Sénégal et dans les pays francophones. Ce qui n'est pas peu dire: que cette génération multinationale accepte ou rejette—ou, plus vraisemblablement, trie avec un regard critique—son héritage, elle aura été durablement marquée par l'esprit et par les travaux de l'Ecole de Dakar.

S'il y avait problème, il était donc ailleurs et plus enfoui. Depuis une dizaine d'années, H. Collomb songeait régulièrement à transmettre ses fonctions à son successeur sénégalais et à rentrer en France où d'autres projets l'attendaient. Ses exigences envers ce successeur étaient à la mesure de ses réalisations et de sa vitalité. Fann, l'esprit, l'oeuvre, l'élan devaient être préservés à tout prix. En la personne du regretté M. Diop il trouva non pas son double mais un homme mûr, fin et solide, un compagnon intellectuel [14] qu'il investissait de ses espoirs et de son affection. Dans une inquiétante série de malheurs—trois morts dont un chasseur de sorcier lié à Collomb, frappé, lui-même, de paraplégie—cet homme disparut. Ses

espoirs se reportèrent alors sur le Dr B. Diop, homme remarquablement intelligent qui dirige actuellement le service. Je n'ai nullement l'intention de le mettre en question car je ne pense pas que ce fût, pour l'essentiel, un problème de personnes. Face à la forte personnalité de H. Collomb, le Dr B. Diop eut l'incontestable mérite et le peu confortable privilège de représenter l'aspiration légitime des psychiatres sénégalais—formés à Fann—à prendre en main leurs institutions et en charge l'organisation de leur métier. L'histoire est banale. Alors même que le fruit de ses efforts arrivait, dans une certaine mesure, à maturité, H. Collomb fut profondément affecté par la sourde et bien compréhensible révolte de ses fils africains. A ses heures sombres, ce père pourtant si peu porté à vivre aux dépens de ses enfants ne pouvait s'empêcher de voir les signes de l'ingratitude dans ce qui n'était, pour une bonne part, qu'une maturante volonté de rupture. Comment prendre en charge l'héritage d'un homme aussi marquant et blanc de surcroît sans prendre d'abord la distance qui permet de retrouver sa propre identité? Il est vrai que la révolte en question—sénégalaise c'est à dire non-violente—se nourrissait aussi du ressentiment laissé par le souvenir—pour ne pas dire l'actualité—de la dépendance coloniale et surtout qu'elle rejeta dans l'avenir incertain de l'"aventure ambiguë" les choix africains qui eussent permis à H. Collomb de vérifier la fécondité de son oeuvre et de repartir dans la conviction de l'africanité de l'héritage de Fann. Le rhizome était-il solidement planté? Le champ défriché n'allait-il pas être envahi par la brousse de la routine? Devait-il être arrosé par la vigoureuse créativité de l'Afrique des peuples ou desséché par la bureaucratie psychiatrique des états qui prônent le "désencombrement humain" [15]? Demain, les petits-fils du Sénégal reconnaîtront-ils en Fann un sillon empathiquement tracé de leur propre terroir humain ou une version tardive mais redoutablement intime et universalisante de l'emprise coloniale? Ou alors, trouveront-ils des voies et un langage tout différents en remplacement du legs occidental, même repensé, de la "psychiatrie"? Mêlées aux miennes, ces interrogations—toujours actuelles et transposables à d'autres recherches africanistes tributaires des faits de parole—étaient, à peu de chose près, celles qui hantaient les dîners de H. Collomb au soir de sa vie. Elles lui indiquaient les limites de son entreprise et le commencement d'une aventure qui n'était plus la sienne. Elles disaient aussi son drame personnel: il a rencontré l'autre, l'Afrique—au prix de s'éloigner des siens—mais il ne pouvait se défaire de l'idée d'une rencontre manquée. Impression de manque qui était du reste un des ressorts essentiels de sa vie et de sa pensée. Que de dire plus en hommage à un homme qui a par ailleurs pleinement vécu?

A présent, son héritage est là et il serait le premier à en faire le tri irrespectueux. Il n'était pas homme de l'écrit et encore moins de la somme. Bien qu'il ait signé, seul ou avec d'autres, près d'un millier de textes—dont un grand nombre d'écrits neurologiques [16]—il n'a publié aucun ouvrage et il n'a donné nulle part une forme synthétique achevée à sa pensée. Les esprits chagrins relèveront dans ses écrits des généralités, des expressions floues, des emprunts rapides, des répétitions... Il n'en reste pas moins l'auteur unique d'une série de textes fondateurs de la psychiatrie afri-

caine: son retentissant article sur les *Bouffées délirantes en psychiatrie africaine* [17], ses tableaux d'ensemble de l'*Assistance psychiatrique en Afrique* [18], d'*Aspects de la psychiatrie dans l'Ouest Africain* [19] ou de *Psychiatrie et cultures* [20], ses articles sur *Agressivité et individuation* [21] ou *La mise à mort de la famille* [22]...et surtout, le rassembleur inimitable des recherches d'une équipe constamment influencée par ses idées et par sa vision de l'Afrique. Il a été le co-auteur, et souvent l'auteur principal, des textes psychiatriques les plus novateurs de Fann sur la dépression [23], la schizophrénie [24], la persécution [25], les bouffées délirantes [26], l'épilepsie [27], le crime [28], le suicide [29]...L'ethno-psychanalyste qui n'hésitait pas à s'écarter de l'orthodoxie freudienne ou lacanienne pour développer dans les travaux déjà cités et dans des écrits sur l'intégration des données culturelles en psychiatrie de l'enfant [30], la famille africaine [31], les problèmes d'éducation [32], le maternage [33], les maladies psychosomatiques [34], les cures traditionnelles [35], la possession [36]...maintes idées nouvelles ou, pour citer deux auteurs canadiens [37] "a series of themes which others have taken up". Il a été aussi l'ethno-clinicien qui aimait se mesurer aux énigmes des conjonctures individuelles à peine déhissées de leur mise en forme traditionnelle: en termes de possession [38], de pratiques mystico-ascétiques [39], d'attaque des esprits [40], de sorcellerie [41]...On pourrait multiplier ainsi ses facettes: l'enseignant soucieux de transmettre sa conception de la formation en psychiatrie africaine [42], l'amateur des "poèmes fous d'Afrique" [43], le penseur de la folie [44] ou de la violence sacrificielle [45]...Mais, est-ce un hasard si sa dernière communication, rédigée quelques semaines avant sa mort, est aussi son ultime réflexion sur le groupe africain et l'ethos communautaire? Dans toute sa vigueur, ambiguïté et souple diversité, H. Collomb a bien été un penseur de l'Afrique.

Son oeuvre personnelle, on l'aura compris, est indissociable du legs de son équipe, des travaux de Fann dont l'examen critique permettra de formuler un jugement équitable de ses apports scientifiques. Passionnants dans l'ensemble, parfois inégaux dans le détail—mais n'en est-il pas nécessairement ainsi des oeuvres d'une collectivité qui gagne en foisonnement ce qu'elle perd, ici et là, en rigueur?—ces travaux viennent d'être recensés. Dans une bibliographie commentée (Nos 2-3 du volume XIV de *Psychopathologie Africaine* [46]) R. Collignon présente succinctement près de sept cent documents (ouvrages, articles, communications, thèses, mémoires, films), soit la totalité des travaux de Fann et leurs prolongements, dans la meilleure tradition documentaliste. Outre un index thématique, les chercheurs et les praticiens africains y trouveront toutes les indications pratiques encore peu accessibles dans leurs pays.

A nous de faire fructifier maintenant l'héritage d'un homme qui s'est aventuré au coeur de l'autre que nous sommes tous aux heures vives de notre existence où, de toutes façons, nous le rencontrerons encore.

#### REFERENCES

1. Voir notamment Ortigues M. C. et E. *Oedipe Africain*. Plon, Paris, 1966; Ortigues M. C. et E., Zempléni A. et



- J. Psychologie clinique et ethnologie (Sénégal). *Bull. Psychol. (Paris)* **270**, 15-19, 950-958, 1968.
2. Ortigues M. C. et E. *Oedipe Africain*. Plon, Paris, 1966.
3. Charasson-Valantin S. Le développement de la fonction manipulateur chez l'enfant sénégalais au cours des deux premières années de la vie. Thèse de IIIème cycle, Faculté des Lettres et des Sciences Humaines, Paris, 1970; Collomb H. et Valantin S. Patterns of mothering, organization of the personality and rapid social changes. *Int. Soc. Sci. J.* **20**, 431, 1968; Collomb H. et Valantin S. Mères et familles multiples. *Rev. Neuropsychiat. Infant. (Paris)* **20**, 53, 1972; On trouvera la synthèse des travaux de J. Zempléni-Rabain dans son ouvrage *L'Enfant du Lignage*, mentionné ci-dessous.
4. Rabain J. *L'Enfant du Lignage*. Du sevrage à la classe d'âge chez les Wolof du Sénégal. Payot, Paris, 1979.
5. Zempléni A. L'interprétation et la thérapie traditionnelles du désordre mental chez les Wolof et les Lébou (Sénégal). Thèse de IIIème cycle, Faculté des Lettres et des Sciences Humaines, Paris, 1968; Zempléni A. et Rabain J. L'enfant *nit-ku-bon*. Un tableau psychopathologique traditionnel chez les Wolof et les Lébou du Sénégal. *Psychopath. Afr.* **1**, 329, 1965; Zempléni A. La dimension thérapeutique du culte des *rab*: *Ndop*, *Tuuru* et *Samp*. Rites de possession chez les Lébou et les Wolof. *Psychopath. Afr.* **2**, 295, 1966; Zempléni A. Du symptôme au sacrifice. Histoire de Khady Fall. *L'Homme* **16**, 31, 1977 (traduction anglaise in Crapanzano V. (Ed.) *Case Studies in Spirit Possession*, pp. 87-139. Wiley, New York, 1976).
6. Diop M. La dépression chez le Noir africain. *Psychopath. Afr.* **3**, 183, 1967; Ortigues M. C., Diop M. et Collomb H. Syndromes de possession, niveaux d'organisation de la personnalité et structures sociales. C.R. *Congrès de Psychiatrie et de Neurologie de Langue Française*, LXIIe Session, Marseille, **1**, 344, 1964; Diop M., Zempléni A., Martino P. et Collomb H. Signification et valeur de la persécution dans les cultures africaines. C.R. *Congrès de Psychiatrie et de Neurologie de Langue Française*, LXIIe Session, Marseille, **1**, 333, 1964, (traduction anglaise in Wickert F. R. (Ed.) *Readings in African Psychology from French Language Sources*, pp. 357-365. East Lansing, African Studies Center, Michigan State University, 1967; Diop M. et Collomb H. A propos d'un cas d'impuissance. *Psychopath. Afr.* **1**, 487, 1965.
7. Voir les rubriques en question in Collignon R. Vingt ans de travaux à la clinique psychiatrique de Fann-Dakar. Essai de bibliographie commentée. *Psychopath. Afr.* **14**, 2, 1978, index thématique, 303-308.
8. Storper-Perez D. *La Folie Colonisée*. Maspéro, Paris, 1974.
9. Beiser M., Ravel J. L., Collomb H. and Egelhoff C. Assessing psychiatric disorder among the Serer of Senegal. *Nerv. Mental Dis.* **154**, 141, 1972; Beiser M., Burr W. A., Collomb H. et Ravel J. L. *Pobouh Lang* in Senegal. *Soc. Psychiat.* **9**, 123, 1974; Beiser M., Benfari R., Collomb H. and Ravel J. L. Measuring psychoneurotic behavior in cross-cultural surveys. *J. Nerv. Mental Dis.* **163**, 10, 1976.
10. Collomb H. Les bouffées délirantes en psychiatrie africaine. *Psychopath. Afr.* **1**, 167, 1965; Ortigues M. C., Martino P. et Collomb H. L'utilisation des données culturelles dans un cas de bouffée délirante. *Psychopath. Afr.* **3**, 121, 1967.
11. Expression sur le vif que j'emprunte à une interview du film *Le N'doep* (16mm couleur 40 mn, son optique, Film médico-scientifique Sandoz, 1967).
12. Sur Bregbo, voir l'ouvrage collectif *Prophétisme et Thérapeutique*. Albert Atcho et la communauté de Bregbo. Hermann, Paris, 1975.
13. Voir notamment Collomb H. L'économie des villages psychiatriques. *Soc. Sci. Med.* **12C**, 113, 1978 et aussi Collomb H. La mise à mort de la famille. *Psychiat. l'Enfant* **20**, 245, 1977.
14. Les deux études de cas qu'ils rédigèrent ensemble sont parmi les écrits les plus stimulants de Fann: Diop M. et Collomb H. A propos d'un cas d'impuissance. *Psychopath. Afr.* **1**, 487, 1965; Diop M. et Collomb H. Pratiques mystiques et psychopathologie. A propos d'un cas. *Psychopath. Afr.* **1**, 304, 1965.
15. Expression sénégalaise officielle qui fit tressaillir, vers 1976, le monde de Fann pour autant qu'elle présageait d'une politique de renfermement ou d'éloignement des malades mentaux et d'autres handicapés sociaux des centres urbains du Sénégal. Le projet DIAMM (Dispositif Itinérant d'Assistance aux malades mentaux) fut conçu (en 1977), entre autres, pour faire face à cette politique: chaque division de l'hôpital fut jumelée avec une région du Sénégal où elle donnait des consultations périodiques préparées par un correspondant local. De la sorte, les malades furent pris en charge sur place et l'on évita les inconvénients multiples de leur hospitalisation. Voir, pour plus de détail et des références, la bibliographie commentée de R. Collignon (*op. cit.*).
16. Dans la bibliographie commentée de R. Collignon (*op. cit.*), on ne trouvera pas ses écrits neurologiques et, plus généralement, bio-médicaux. Ceux-ci, joints à ses publications psychiatriques et autres, seront réunis en une bibliographie générale. Renseignements: Psychopathologie Africaine, C.H.U. de Fann, B. P. 5097, Dakar, Sénégal.
17. Collomb H. Les bouffées délirantes en psychiatrie africaine. *Psychopath. Afr.* **1**, 167, 1965.
18. Collomb H. Assistance psychiatrique en Afrique (expérience sénégalaise). *Psychopath. Afr.* **1**, 11, 1965.
19. Collomb H. Aspects de la psychiatrie dans l'Ouest Africain (Sénégal). In *Beitrag zur vergleichenden Psychiatrie/Contributions to Comparative Psychiatry* (Petrilovitch N., Ed.), pp. 229-253. Karger, Basel, 1967.
20. Collomb H. Psychiatrie et cultures (considérations générales). *Psychopath. Afr.* **2**, 259, 1966.
21. Collomb H. Agressivité et individuation. In *Psychiatry (Part I), Proceedings of the Vth World Congress of Psychiatry (Mexico, 1971)*. Amsterdam, Excerpta Medica International Congress Series, No. 274, pp. 144-151.
22. Collomb H. La mise à mort de la famille. *Psychiat. l'Enfant* **20**, 245, 1977.
23. Collomb H. et Zwingelstein J. Les états dépressifs en milieu africain. *Informat. Psychiat.* **6**, 515, 1962; Hanck Ch., Collomb H. et Boussat M. Dépressions masquées psychotiques ou masque noir de la dépression. *Acta Psychiat. Belg.* **76**, 26, 1976; Collomb H. Les aspects culturels des dépressions. *Rev. Pratic.* **39**, 1978; Cf aussi Diop M. La dépression chez le Noir africain. *Psychopath. Afr.* **3**, 183, 1967.
24. Collomb H., Martino P. et Ortigues M. C. Etude d'un cas de schizophrénie (approche multi-disciplinaire). *Psychopath. Afr.* **2**, 9, 1966; Collomb H. et al. Psychopathologie et environnement familial en Afrique. *Psychopath. Afr.* **4**, 173, 1968.
25. Diop M., Zempléni A., Martino P. et Collomb H. Signification et valeur de la persécution dans les cultures africaines. C.R. *Congrès de Psychiatrie et de Neurologie de Langue Française*, LXIIe Session, Marseille, **1**, 333, 1964 (traduction anglaise in Wickert F. R. (Ed.) *Readings in African Psychology from French Language Sources*, pp. 357-365. East Lansing, African Studies Center, Michigan State University, 1967; Cf sur ce sujet également Ortigues M. C. et E. *Oedipe Africain*



- (op. cit.) et Zempléni A. De la persécution à la culpabilité. In *Prophétisme et Thérapeutique* (Piault C., Ed.), pp. 153-218. Albert Atcho et la communauté de Bregbo., Hermann, Paris 1975.
26. Collomb H. Les bouffées délirantes en psychiatrie africaine, op. cit.: Ortigues M. C., Martino P. et Collomb H. L'utilisation des données culturelles dans un cas de bouffée délirante. *Psychopath. Afr.* 3, 121, 1967; Martino P., Simon M. et Collomb H., Bouffées délirantes et schizophrénie. Réflexions. IIème Colloque Africain de Psychiatrie, Dakar, 5-9 mars, 1968.
  27. Collomb H., Dumas M., Ayats H., Virieu S., Simon M. et Roger J. Epidémiologie de l'épilepsie au Sénégal. *Afr. J. Med. Sci.* 1, 125, 1970; Collomb H., Ayats H., Dumas M. et Diop B. L'épilepsie de l'enfant et de l'adolescent au Sénégal. *Proceedings of 2nd Pan African Psychiatric Workshop* (Raman A. D., Ed.), pp. 137-140. Mauritius, 22-26 June 1970, Association of Psychiatrists of Africa, 1970.
  28. Collomb H., Ayats H. et Langier P. La réaction sociale contre le crime au Sénégal. *Rev. pratique de psychologie de la vie sociale et d'hygiène mentale* 2, 333, 1970.
  29. Collomb H. et Collignon R. Les conduites suicidaires en Afrique. *Psychopath. Afr.* 10, 55, 1974.
  30. Ortigues M. C., Martino P. et Collomb H. Données culturelles et psychiatrie de l'enfant dans la pratique clinique au Sénégal. *Acta Paedopsychiat.* 36, 104, 1969; Ortigues M. C., Martino P. et Collomb H. Intégration des données culturelles africaines à la psychiatrie de l'enfant dans la pratique clinique au Sénégal. *Psychopath. Afr.* 2, 441, 1966.
  31. Collomb H. et Valantin S. Famille africaine (Afrique Noire). En *L'enfant dans la famille* (Anthony J. et Kupernik C., Ed.), pp. 325-349. Masson et Cie. Paris, 1970; Cf également Collomb H. La mise à mort de la famille, op. cit. et Berne C. et al. *La Conception de l'Autorité et Son Évolution dans les Relations Parents-Enfants à Dakar*. Fédération internationale des écoles de parents et d'éducateurs, Paris, 1968.
  32. Diop B. et Collomb H. Problèmes éducationnels au Sénégal: relations interfamiliales, modèles et autorité dans la société wolof. In *Proceedings of 2nd Pan African Psychiatric Workshop* (Raman A. D., Ed.), pp. 75-79. Association of Psychiatrists in Africa, 1970.
  33. Collomb H. et Valantin S. Modalités de maternage, organisation de la personnalité et changements sociaux rapides. *Rev. Int. Sci. Social.* 20, 473, 1968; Cf également Zempléni-Rabain J., Modes fondamentaux de relations chez l'enfant wolof, du sevrage à l'intégration dans la classe d'âge. I. Les relations de contact physique et de corps à corps. *Psychopathologie Africaine*, 1966, II, 2, 143-178.
  34. Collomb H. Maladies psycho-somatiques au Sénégal. *Acta Médica Psychosomatica*, 1967, 3-13; voir aussi Le Gérinel N., Troubles névrotiques et troubles psychosomatiques en milieu africain. *Etudes Médicales* (Le Caire), 1968, 33-42.
  35. Collomb H., Rencontre de deux systèmes de soins. A propos des thérapeutiques des maladies mentales en Afrique. *Social Science and Medicine*, 7, 629, 1973; Collomb H., Le lieu thérapeutique, *Topique* (Paris), 11-12, 195, 1973; Collomb H., Psychiatrie moderne et thérapeutiques traditionnelles. *Ethiopiennes* 2, 40-54, 1975; Collomb H. et Zempléni A., *Le N'doep*, Film 16 mm couleur, 40 mn, son optique. Film médico-scientifique Sandoz, 1967; voir aussi à ce sujet Aguin R., *Le temps et la thérapeutique* (essai sur les guérisseurs du Sénégal), Thèse de IIIème cycle, Université de Paris VII, Paris, 289 p., 1975; voir également mes travaux mentionnés en note (5) ci-dessus.
  36. Ortigues M. C., Diop M. et Collomb H., Syndromes de possession, niveaux d'organisation de la personnalité et structures sociales, art cit: note (6); Collomb H., Martino P., La possession chez les Lébou et les Wolof du Sénégal. Sa fonction de régulation des tensions et des conflits. *Bulletins et Mémoires de la Faculté Mixte de Médecine et de Pharmacie de Dakar*, XVI, 125, 1968; Voir aussi le remarquable article de Diop B., Etat maniaque, *rab* et structure oedipienne, *Revue des Centres Hospitaliers Universitaires* (Paris), 29, 12, 1974; Collomb H., Diop M., Martino P. et Zempléni A., Hystérie et crise de possession, C.R. *Congrès de Psychiatrie et de Neurologie de Langue Française*, LXVIII-ème Session, Lausanne, 389-399, 1965; Collomb H., Zempléni A., Sow D., Aspects socio-thérapeutiques du N'doep, cérémonie d'initiation à la société des possédés chez les Lébou du Sénégal, in Moreno J. L. (ed.), *The International Handbook of Group Psychotherapy*, 8, 293, 1965; Voir, là encore, M. C. et E. Ortigues, *Oedipe Africain* (op. cit.), mes propres travaux notés en (5) et les articles de synthèse de H. Collomb (notes 17-20).
  37. Corrin E., Murphy H. B. M., Psychiatric Perspectives in Africa. Part I: the Western Viewpoint. *Transcultural Psychiatric Research Review* (Montréal), 16, 147, 1979.
  38. Ortigues M. C., Martino P., Collomb H., L'utilisation des données culturelles dans un cas de bouffée délirante, art. cit. en note (10); Martino P., Bert J., Collomb H., Épilepsie et possession (à propos d'un cas privilégié), *Bulletin de la société médicale d'Afrique Noire de langue française* (Dakar), 1, 48-48, 1964; voir les autres références mentionnées en note (36) et mon article Du symptôme au sacrifice. Histoire de Khady Fall Cf note (5).
  39. Diop M. et Collomb H., Pratiques mystiques et psychopathologie. A propos d'un cas. *Psychopathologie Africaine* 2, 304-322, 1965.
  40. Diop M. et Collomb H., A propos d'un cas d'impuissance. *Psychopathologie Africaine*, 3, 487-511, 1965.
  41. Martino P., Zempléni A., Collomb H., Délire et représentations culturelles a propos du meurtre d'un sorcier. *Psychopathologie Africaine*, 1, 151, 1965; Collomb H., Sorcellerie-anthropophagie et relation duelle, *La Folie*, Collection 10-18, Paris, U.G.E., 349, 1977; Collomb H., La sorcellerie-anthropophagie (genèse et fonction). *Evolution Psychiatrique* (Paris) 3, 499, 1978; Voir toujours *Oedipe Africain* et travaux synthétiques de H. Collomb, notes (17-20) ci-dessus.
  42. Collomb H., Stievenard C. et J. M., Psychologie médicale à l'Université de Dakar. *Revue de Médecine Psychosomatique et de Psychologie Médicale*, (Paris), 2, 147, 1973; Blochet R., Boussat M., Collomb H., Enseignement de la psychologie médicale et de la psychiatrie à la Faculté de Médecine de Dakar. *Afrique Médicale*, 124, 947, 1974; Collomb H., Boussat M., Leonetti R., Formation et rôle de l'infirmier psychiatrique à Dakar. C.R. *Congrès de Psychiatrie et de Neurologie de Langue Française*, LXXIIe Session, Auxerre, 1974, Masson ed., 706-713, 1974; Diop B., La formation de personnel paramédical en psychiatrie, IVème Congrès Pan-africain de Psychiatrie, Abidjan, juillet 1975.
  43. Collomb H., Poèmes fous d'Afrique, *Neurologie-Psychiatrie*, Sandoz (Rueil-Malmaison, France), 6, 1972.
  44. Collomb H., Communication et Folie. *Recherche, Pédagogie et Culture* (Paris), 25, 3-9 (No spécial "Communication et Folie"), 1976.
  45. Collomb H., Violence, sacrifice et thérapeutique, in *La Violence*, (actes du colloque de Milan, 1977), Paris, U.G.E., Collection 10-18, 319, 1978.
  46. Renseignements et commandes: *Psychopathologie Africaine*, B.P. 5097, Dakar, Sénégal.

## POLITICAL AND ECONOMIC CHANGES IN NIGERIA AND THE ORGANISATION OF MEDICAL CARE

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**Abstract**—This paper seeks to go beyond the "cultural-complex" framework of structural functionalism in analyzing factors which influence the organization of medical care and its effectiveness. It therefore examines the effects of political and economic changes on the development of medical care systems. This is done by taking Nigeria as a case study and analyzing the organization of medical care within the context of three periods; the precolonial, the colonial and the postcolonial. During the first period, a stable agricultural base and economic surplus gave rise to independent health practitioners and a decentralized medical system. Colonial domination brought health within the government's domain. A foreign, centralized, urban and hospital-based system began to compete with the indigenous system. Its inability to reach most people did not change during the postcolonial period. In addition, economic policies affecting rural/urban migration trends have greatly inhibited the copying capability of medical services in Nigeria.

### INTRODUCTION

The aim of this essay is to analyze some of the political and economic conditions which have influenced the organization and effectiveness of the medical care system in Nigeria. Medical care systems are essentially societal subsystems which develop and function within particular frameworks (i.e. they operate as open sub-systems). This viewpoint is appreciated by two prominent perspectives in sociology—i.e. structural functionalism and the materialist conflict model. In so far as the former attempts to locate medicine within societal systems, the influence of the "cultural framework" is normally emphasized [1-4]. The approach has been to discover the effect of such "culture complexes" [5] as religions, philosophy and linguistics on medicine.

The problems often neglected by structural functionalists are important for those working within the materialist conflict perspective. These are the effects of economic/organizational factors which are readily seen as forming the "objective" environment of medical systems in contrast to the aforementioned "subjective" psychological/cultural factors [6]. The political/economic framework of society will have an impact on both the structure of the medical care system [7], the nature, and the volume of diseases to be treated. Changes in the framework are often registered by changes in medical organization and/or disease patterns [8]. At times the problems generated also affect the coping capability of the medical delivery system.

As with many other developing nations, the Nigerian historical experience allows a division into three distinct eras—the precolonial; the colonial; and the post or neocolonial. Given this experience, one would expect developments in the organization for medical care to have been influenced by the politico/economic changes and conditions within the larger society. I shall therefore attempt to examine the organization of medicine and its problems, as reflections of these larger societal forces.

### THE PRECOLONIAL CONTEXT

The precolonial period in Nigeria lasted until 1861, when the British took over the administration of the colony of Lagos [9]. This was then followed by a unification of protectorates into one territory (i.e. Nigeria), in 1914. From scattered evidence, it is believed that Africa developed into the "Mature Iron Age" sometime around 1000 AD [10]. In West Africa, the economic system that flourished after this date was based on subsistence agriculture. The family was the basic economic unit, and individuals had rights to land as lineage members in the community. This stable agricultural system as it matured, provided enough food surplus to support the emergence of specialist groups (e.g. wood carvers, smiths, potters and leather workers), and inter-regional trade. Besides this growth of exchange systems, large political units and complex governments structures also emerged. This occurred particularly among groups like the Bini, Yoruba, Mausa, Fulani, Nupe and Kanuri. For example, after the local Sudanese farmers had been overrun by nomadic berber groups around the tenth century, their new rulers (known as Hausa) developed city-states which were Islamic settlements [11]. Islam was not merely a religion but a way of life that brought with it new methods of social and political organization. It also put the area in contact with new commercial practices and the trade occurring between the Sudan and North Africa. Following the Fulani conquest of the city-states (1804-11), the vast area later known as Northern Nigeria, developed into a state composed of emirates in which loyalties transcended personal allegiances to clans. There developed a sophisticated literate administrative system marked by a strict hierarchical system of authority, with the emirs at the apex. This pyramidal system later became very useful to the colonial administrators.

During the precolonial period, certain developments occurred in the practice of medicine. First, there was the emergence of individuals concerned

with "divining and doctoring" [12]. Diviners and herbalists were among some of the aforementioned specialist groups which evolved at this time. The economic surplus circulating through the exchange system allowed some members of the community the time and energy to pursue specialized areas of knowledge. They did not have to be fully engaged in agriculture. Those concerned with medical care could concentrate on the development of an integrated body of knowledge for a more efficient explanation and treatment of illness. To say this, is not to deny the structural functionalist argument that religious and philosophical beliefs permeated and reinforced the provisions made for the treatment of disease [13-14]. Indeed, within the Fulani/Hausa emirates, for example the religious teachers (mallams) were also recognized as healers. Much of their practice was based on the Koran. Koranic charms and amulets were used to ward off evil spirits, the future was divined by means of the Koran, and most important, the community was taught that whatever befell was the will of Allah. Nevertheless the argument here is that the economic surplus gained through agriculture and trade "released" individuals to develop more effective systems of dealing with disease and other mishaps. Medical knowledge and resources thus no longer resided completely within families (i.e. residing in the public at large), as still occurs among poorer or less economically advanced groups such as the Gnaou of New Guinea [15]. In that society, social differentiation is still at a minimum and the practitioner's role has yet to crystallize. On the other hand, among the precolonial West African groups, information about special herbal cures, and access to powerful supernatural forces had already become the preserve of specific individuals. These specialists stood at a pivotal point between the community and its surrounding physical and spiritual environment.

Another point to be made about the organization of medical care during this period was that it was *decentralized*. Medical care was readily available even to slaves [16]. Control over the practice of practitioners was not a sphere of governmental activity. The independent practitioners were community based, in that large secluded institutions (i.e. hospitals) were not used for the treatment of sick persons. Rather people were seen in the practitioners' compounds, in their own homes (e.g. with child-birth), or at shrines and other designated locations (e.g. rivers). Some chronically ill individuals (leprosy, ulcer or insane patients) were often accommodated in special rooms within the doctors' homes. Success depended on a thorough knowledge of the social as well as the physical environment, since diagnosis involved "social analysis", and therapy was often an avenue for cementing fragmented relationships. By reducing interpersonal friction and stress, the balance of forces was probably tipped in favour of the patient's recovery [17], and opposing parties were once again at peace [18]. However, to focus exclusively on the integrative aspects of traditional medical systems (structural functionalism) is to imply that medical systems are immuned to shifts in relationships between groups brought on by economic and political changes.

Since the medical system is an open subsystem, it tends to reflect and reinforce changes in the social

organizational aspects of the larger system [19-20]. While medical care was decentralized, we cannot assume that it was equally accessible to differentially ranked individuals. In each community, some men were able to acquire additional wealth, power and personal following. These privileged individuals enjoyed certain rewards such that "within the limits of the local economy, their diet is richer, their food supply assured, their houses larger, their clothing more extravagant. They enjoyed a number of wives" [21]. One may add to this list of privileges "the best medical attention", for it is inconceivable that the more powerful individuals did not have special access to the service of healers. In stating that among the Yoruba "medicine people" were often at the service of the King, Johnson lends credence to the above argument [22], since other notables must have also enjoyed such privileges.

Procedures for inflicting harm were devised along with curative therapies by those practitioners who were also versed in sorcery [23-24]. Wealthy persons were in a better position to purchase these expensive sinister preparations [25] or solicit the assistance of practitioners. Again, traditional doctors themselves were sometimes part of the shifts in power relations between community groups. Their special relationship with the supernatural put them in a strategic position to intimidate even political officials. Thus in Bonny (South Eastern Nigeria) in the 1840s, the chiefs confessed their reluctance to bring a doctor to justice. He "is held sacred and his office allows him to commit with impunity any crime even murder; the Bonny people have a superstition that if his blood (the slightest particle) is shed by them within the precinct of the country, the whole people would cease to exist" [26]. Similar problems were said to exist elsewhere, e.g. among Yoruba specialists, where the mode by which smallpox spread appeared to have been understood during the precolonial era (although among laymen the god Sopona was generally believed to cause the disease). The Sopona secret society practised variolation by using dried scabs for inoculations. However, it was alleged that epidemics were sometimes created to increase the cult's clientele. This was accomplished by infecting people "with scrapings of the skin rash of actual smallpox cases" [27]. The cult was later outlawed by the Colonial Government in 1917. Thus in so far as it was possible to take advantage of their position or work for private interests, the activities of some traditional healers were not always integrative.

In summarizing, one can say that while many unsolved health problems undoubtedly persisted, much of the strength of the traditional medical system lay in the fact that it was largely decentralized and locally available. Although the practitioners generally sought to curtail disruptive tensions in the community, some were not above taking advantage of their special knowledge and pivotal position in the relationship between men and the spiritual world.

#### THE COLONIAL CONTEXT

The British encountered resistance both in the South and North as they penetrated the hinterland in an attempt to bring vast areas under their control. Nevertheless, in 1914 Nigeria became a unified terri-

Table 1. Capital expenditure for health programmes

1946	£
New hospitals and extensions	2,483,250
Housing for staff, epidemic units	85,500
Rural health centers	149,000
New maternity hospitals	109,400
Pharmacy school	16,300
Nurses training school	23,450
Health visitors school	10,650
TB sanatoria	48,000
New mental hospitals	335,000
Total	3,260,550

Source: *A Health Programme for the Nation*, p. 131. N.M.A. Publication.

tory under British Colonial rule. From the onset, the task of ruling the new territory threatened to be impossible given the administration's limited personnel. It therefore became expedient to institute indirect rule. The idea was first tried in the North where the indigenous administrative system was put to use by Lugard, the High Commissioner. The British were to rule through the emirs, who were to be left in power. Indirect rule then spread to the south where new authority systems sometimes had to be fabricated to facilitate the task of the Colonial Administration. This approach was originally advocated as one which allowed the independent development of traditional institutions, since there was to be little direct interference. However, it did create problems some of which had repercussions on the development of medical care, as will be shown shortly.

Colonial domination affected in fundamental ways the lives of those incorporated into the new nation. Much has been written on the fact that the economy was now fully integrated into the international capitalist market with labour being used for peasant, and urban production to benefit the British economy [28-31].

With regard to health, there was an attempt to develop a medical care system that was different in many respects from existing traditional systems. Initially facilities were meant only for the European population. However, this was later extended to indigenous government officials, policemen, airforce men etc. and to some extent (particularly after 1952) to other members of the population. The new system was instituted as part of the colonial administration and penetrated the territory with the full political backing of the administration.

One of the most striking aspects of the new medical care delivery system was that decision making was highly centralized. Schram reports that "A centralized medical service at first military and then colonial in structure, gave birth to a uniform medical and sanitary service" [32]. The problem with the new system was that planning was in the hands of a few highly placed colonial officers, responsible for the nation's health. Independent medical work and initiative at the local level remained scanty throughout the colonial period [33]. The first effort at national health planning was a document issued in 1946. It had been drawn up by the Director of Medical Services, Dr J. Harkness and his deputy Dr G. B. Walker. However,

"Dr Harkness and Walker were not under any obligation at that time to consult anybody in the preparation of such a plan except, perhaps, their private friends" [34]. Needless to say, the plan had many gaps partly due to the fact that the planners lacked much of the information necessary for the task. This method of planning has been referred to as the "traditional method" [35] whereby "experts" are expected to draw up master plans and allocate funds. It is assumed that by virtue of their special qualifications, particular individuals are best suited to determine community goals and means. Under Colonial rule, the very structure of the relationship between the administration and the colonized (i.e. the social distance between them) enhanced the traditional approach to planning. Unfortunately, this method of planning persisted even when there was limited self-government and health became a subject over which the regional governments (North, West, and East) had power in 1951.

The context within which planning occurs (i.e. the social organization of planning) is a factor which affects its outcome [36]. Thus the process of planning discussed above did affect the structure of medical care delivery. Both the colonial health plan and those developed by the Western educated indigenous planners were modelled after what pertained in the West. They were biased in favour of hospital based curative oriented facilities. Though it was recognized that improvements were needed in preventive and rural care, these were highly neglected aspects. For example, the 1946 health plan stated that "the first objective (emphasis added) is the establishment of one or more first class hospitals in each Province with full facilities for the scientific investigation and treatment of diseases" [37]. Those Nigerians planning for health in the Western region also emphasized the expansion of hospital services. From Tables 1 and 2, one can observe that allocations for projects were biased in favour of specialist and general hospitals.

Among the indigenous planners in the newly created Western region, hospital building was to be used to win the allegiance of the population. Thus "the development of hospital services is also necessary in order to win the confidence of the public. Without

Table 2

1962	£
Lagos University Teaching Hospital	2,820
University College Hospital, Ibadan	2,050
Lagos General Hospital	1,269
Health centers	0,715
Nurses hostel	0,500
Royal Orthopaedic Hospital	0,650
Children's Hospital	0,800
Mental Hospital	0,800
Yaba Smallpox Vaccine Laboratory	0,750
Dental service	0,200
Expansion Public Health Laboratories	0,125
National Institution for Social & Pre. Med	0,150
Post Graduate Nursing School	0,150
Total	10,304

Source: *A Health Programme for the Nation*, pp. 148-149. Nigeria Medical Association Publication, 1966.



this confidence, preventive medicine would stand little chance of success" [38]. There is no doubt that medical care is often employed for goals other than that of alleviating suffering. Twaddle [39] and Waitzkin [40] argue that medical services may serve to reinforce stratification systems. Lasker [41] and Schatzkin [42] have documented how health plans have been devised to enhance economic goals. Both show that policy makers are often aware of the connection between labour productivity and the health status of workers. The above reference to the intentions of planners in Nigeria, indicates how medicine can serve the political goal of gathering support for political parties. In fact political pressure gave rise to the construction of hospitals, maternity centres and dispensaries throughout the nation. Many had to remain closed or poorly maintained for years due to the lack of staff or supplies [43, 44].

Personal curative care tended to receive more attention than public health. This occurred in the face of governmental data showing preventable infectious and parasitic diseases as responsible for much of the mortality. The most common diseases were smallpox, malaria, worm infestations, yaws, dysentery and pneumonia/bronchitis. Data from the three regions in 1953 showed infective and parasitic diseases were the most prevalent problems among outpatients. They represented 30.5%, 24.4% and 20.1% of all clinic visits in the North, East and West respectively. In Lagos (1959) pneumonia/bronchitis accounted for 22.3% of all deaths and together with malaria and dysentery accounted for 44.6% of the deaths [45, 46].

As in other colonized territory, the facilities that were built were mostly in the urban areas [47, 48]. Medical work carried out by missionary groups sometimes penetrated the rural areas a little deeper as with maternal and child programmes [49], but this was insufficient to alter the overall urban-rural imbalance of services. Since most of those working for the government lived in towns the bulk of the institutions were built in these locations. Many Nigerian towns flourished because they served as linkages (both administrative and distributive) between the agricultural areas producing cash crops, and the coastal ports exporting the raw materials. In 1946 marketing boards were set up to help organize the sales of agricultural produce. They were to stabilize seasonal fluctuations by buying from farmers at fixed prices and exporting the goods on the world market. Any surplus that accrued was to be used for national development. However, most of the revenue was invested in the towns to support their growth, resulting in an economic drain on the rural areas [50, 51]. Not only were most of the social services located in the towns, but the transfer of resources restricted the ability of rural communities to finance projects. Urban/rural imbalances in the distribution of health services were further compounded by regional imbalances, since fewer facilities existed in the North. This was partly due to the fact that the South had been in contact with the British for a slightly longer period. However, it was also a result of the applications of indirect rule. The government decided that the rates at which changes were to be introduced in each region should differ, with the North developing more slowly at its own pace [52]. Since this vast region was the most

difficult to administer without the assistance of the emirs, anything that challenged their authority was seen as a challenge to indirect rule. Thus Western education was limited and developed mainly for the requirement of the Native Administration. At the time of independence for example, there were 700 secondary schools in the West, but only 41 [53] in the North, even though the North had over twice as many persons as the West (1963 census gives figures as 12,802,000 for West; 29,809,000 for North). While at this time the North had a doctor/patient ratio of less than 1:120,000, that of the West was about 1:25,000 [55]. Missionaries who often substituted government work in the spheres of health and education were never allowed to move as freely in the North as they did in the South [56].

Another important dimension of the medical system, was the fact that the independent general practitioner was unable to emerge as the cornerstone of the delivery system, as occurred in America or Britain. Most physicians in Nigeria were salaried workers either with the government, the missionary agencies or companies. Both economic and political reasons were responsible. Economically, the population could hardly support a network of private practitioners as a large and wealthy middle class did not exist. In 1955, the per capita income was £20 per annum as compared to £664 in the U.S.A. and £273 in Britain [57]. The average Nigerian could not afford the fees of solo practitioners [58].

The structures of medical care systems are often affected by the outcome of confrontations between powerful vested interests [59, 60]. For example the result of conflicts in interests among various professional groups, industrial, or consumer groups in a nation would affect the adoption of new ideas such as compulsory health insurance, greater professional autonomy for the new health occupational groups, or a decrease in central control over planning. With regard to the aforementioned issue of sole practice in Nigeria, there was from the onset fierce competition between the colonial government and those who tried to establish independent practices (Europeans or Nigerians). As a reaction against the growth of independent private practice, the administration used its political power to undercut the work of private doctors. Dr Agbaje a prominent Ibadan practitioner in the 1930s recounted the activities of the government [61]. Medical fees were drastically reduced in all government establishments thus giving them an advantage over all private ones. Sick certificates issued to workers by private doctors were not to be accepted by government officials. Government physicians also personally canvassed for new patients where private clinics were located. This type of activity discouraged young physicians from venturing out alone. By 1960, there were only 14 private physicians in the Western region as compared to 60 government doctors [62] (there were also 36 mission doctors and 12 working for firms). The lowering of consultation fees obviously worked in the public's favour. Unfortunately, there was also an unforeseen consequence. In government service, the trend was towards early specialization [63], general medical practice being de-emphasized. Given the pattern of disease discussed earlier, this trend can be seen as premature, at the

very least. Again, Freidson has argued that physicians (particularly specialists) who work in large prestigious institutions are one step removed from the community [64]. Unlike the independent generalist, they are not located within the "lay referral system", are able to resist client evaluation, and do not respond readily to community needs.

Competition existed between the indigenous medical system and the new one. Although within the system of indirect rule, traditional medicine was not outlawed, there was suspicion on both sides and the administration assumed it had the final word on any traditional practice (e.g. the banning of the *Sopona Cult*). To the traditional practitioner, the new doctor must simply have appeared as an intruder, and to the latter, the indigenous doctor was, on the whole not to be taken seriously. Traditional practices generally did not receive either political backing, funds or research facilities from the colonial administration. In fact some authors have noted the degree of secrecy and seclusion that characterizes the behaviour of traditional practitioners. Some believe that this secrecy is not unconnected to the competition experienced during the colonial era. Addressing itself to the role of traditional medicine in Africa, the WHO Regional Committee for Africa stated in 1976 that, "For a long while the traditional healer was harried, and withdrew into himself, whence his isolation and mistrust. While the determined preservation of his secrets made him immune (*sic*) from measures taken by hostile authorities, it also guaranteed him his living" [65]. The outcome of this, no doubt, was a restriction on the rejuvenation and theoretical expansion of the traditional system, as well as diminished cooperation between the two systems.

While the administration implanted a medical care system to attack disease, its economic policies helped to create situations which overburdened this system. For example, the British did not alter the basic pattern of small-scale production. No major agricultural innovations were instituted to increase output. Rather, farmlands were merely extended which often had negative health effects. When people began to move into areas they had traditionally avoided because of vectors, diseases such as malaria and sleeping sickness spread. This happened for example, among the Rubuka of the Bauchi Plateau in the North [66]. With the emphasis on a few cash crops, as opposed to the variety of traditional food crops, malnutrition became a problem in the rural areas. In the cities, the low wages of workers contributed to this illness [67]. Thus the very problems with which medicine had to contend were often the result of colonial policies. In summarizing, it can be said that during the colonial period, a new medical care delivery system was introduced. This system was centrally planned and favoured salaried specialists in comparison with fee-for-service general practitioners. It also tended to be hospital-based and was located largely in the urban areas. This meant that unlike the indigenous system, with which it remained in competition, there was little coverage of the population. Three quarters of the population still resided in the rural areas. Much of the time it appeared even to the British themselves that little headway was being made [68]. We may conclude that both the structure of the

delivery system and the prevalence of some disease were greatly influenced by the political and economic changes.

#### THE POST-COLONIAL CONTEXT

Nigeria received her independence in 1960. The post-colonial period has been marked by changes, as well as continuities in the country's political and economic experience.

Political independence saw the growth and entrenchment of a small but significant upper stratum of the indigenous population. This group has at various times been referred to as the "elite" and the "organizational" or "bureaucratic bourgeoisie". While wealth is an important element, education has been the main avenue for admission. This group is of interest here, because it is largely composed of individuals strategically placed in the decision-making organizations [69]. The economic policies pursued by this group have been basically similar to those operating during the previous period. There has been a continued encouragement of foreign investors and an interest in the types of skill and industries which has further tied the nation to the capitalist world. Planning for the nation has continued to be highly centralized, particularly after the military takeover in 1966 [70]. After the civil war, the nation was divided into 12, then 19 states. Health then became the state's responsibility with each planning, maintaining and staffing its own projects. This however did not alter the pattern of health care throughout the nation. Since the social organization of planning did not change after independence, we should not expect a radicalization of the structure of the medical care delivery system. In fact, there has been a continued emphasis on curative-oriented hospital and urban based medical practice [71, 72]. This has been partly due to the fact that both the practitioners (those trained abroad as well as in the country) and civil servant planners are generally only familiar with the British patterns of health care. To date, the impact of physicians trained outside the West has not been felt.

The only notable change has been the proliferation of private clinics (particularly maternity centres). These are owned by both Independent practitioners and hospital salaried physicians. Many are ill-equipped and there is a tendency for hospital doctors to divert patients to their private clinics treatment and the paying of fees, after diagnosing with hospital equipment [73, 74]. Profits are undoubtedly the motivating factor, since in a market economy, attempts are made to minimize overhead costs. The Military Government recently sought to upgrade the quality of private practice by making it illegal for hospital physicians (among other professionals) to establish private clinics, and by insisting on a 5 year salaried period for all new graduates. Through the Nigerian Medical Association, physicians are at present protesting against the decree. The issue as yet remains unsettled.

Independence brought hope for economic development, but development has been elusive. The unfavourable dependent relationship with the West has gone unchanged [75, 76]. The policies developed in an attempt to gain economic independence have had

serious repercussion on the effectiveness of the medical service. Development was to occur through the stimulation of the industrial sector. Therefore, the location of projects was purely on economic consideration [77], with little thought for social or regional imbalances.

Consequently a few large centres such as Lagos, Ibadan, Port Harcourt and Kaduna received the bulk of the investments. By 1965, 32% of the manufacturing plans were located in Lagos. Another 50% existed within the urban clusters of the four regions (the mid-western region had been carved out of the Western region in 1962.) The distribution of industries further stimulated in-migration from the neglected rural area. Private enterprises have also favoured locations with pre-existing infrastructural facilities and market opportunities offered higher income urban groups.

The growth of industries in these cities has never however, matched the influx of job seekers. Our cities have continued to grow as outwardly oriented "consumer innovation" [78], where output is low and the general standard of living remains low. In this milieu, medical services are overburdened, even though they absorb a disproportionately high percentage of budgetary allocations to health [79]. Given the above, local solutions (i.e. intra-city) will only bring limited results, since it is the larger societal forces affecting the distribution of persons and the general living conditions, which will influence the long term coping capability of the medical care system.

While still unable to bring under control many of the infectious diseases that plague underdeveloped nation [80], medical service in Nigeria is increasingly confronted with problems associated with industrial hazards. In an occupational health survey conducted in two southern states, it was concluded that preventive measure were largely lacking in industrial complexes [81]. The high concentration of dust particles in the atmosphere, unbearable noise, poor toilet and catering facilities, as well as badly designed plants were some of the problems observed. As a result of the accidents and illness arising from the inadequate attention given to prevention, the industrial sector is continually able to transfer some of its operating costs to the medical sector.

With each of the three post independence development plans (1962-68, 1970-74, 1975-80), high priority has been given to education. Budgetary allocations ranked 5th, 2nd and 4th for the three plans. Universal free primary education commenced in September 1976. With regard to health, the problem in the schools is similar to that existing within the factories. Many buildings are erected without the basic toilet facilities. A recent survey of primary schools in Ife revealed that many schools still do not have these facilities [82].

Since independence there has also been a growing interest in the possibilities of integrating Western orthodox and traditional medical practice. It is known that the bulk of the population attend traditional clinics. To date coverage by Western type services reaches about 25% of the population. Even with the proposed Basic Health Scheme, less than half of the nation will be covered in the 1980s [83]. Although there is as yet no national policy on the issue—the Third National Development Plan is silent on this—

individuals (including the present author) and state governments are exploring the theoretical and practical possibilities for integration. A forerunner for integration is the Aro Psychiatric Hospital outside Abeokuta where Dr Lambo began work in 1954. Unfortunately, the pattern developed for treatment there has not spread to other medical institutions.

In concluding this section, one should emphasize the fact that there have been no profound changes in either the method of planning or the structure of the medical services which had developed during the previous era. To understand the reasons, one must appreciate the fact that allocations of resources and the acquisition of skills continue to favour the industrializing (or commercial) urban areas where the educated reside. The distribution of medical services has merely remained one facet of this pattern. Within the urban areas however, the medical facilities are being overrun as a result of the in-migration of those seeking economic opportunities.

#### FEEDBACK FROM THE MEDICAL SUBSYSTEM

In this article I have focused on the impact of political and economic conditions on the structure and effectiveness of the medical care system. It has also been pointed out that medical systems affect their environments in ways unrelated to the normal health goals. Medical subsystems do not only maintain the smooth running of the social system by preserving people's ability to perform their social roles adequately as argued by structural functionalists [84], but are utilized for other interests of the larger system. They sometimes serve nonmedical goals, such as enhancing economic or political goals as noted in this essay. Illich also suggests that health policies are responsible for some of the unnecessary industrial expansion taking place in the world. He questioned the way health issues are posed, as well as the occupational groups and institutions developed to solve health problems. These then serve to reinforce our dependency on elaborate high level technology which is developed through additional industrial research and experimentation [85].

It may also be argued that structural conflict may develop between a medical subsystem and its larger societal system. If each is organized on different principles the constraints on the lower level system will affect its ability to function for example, a socialistic medical system may be embedded in a capitalist society. While the Nigerian economic history has been based on "competitive Capitalism" [86], the idea of evolving a government owned medical care system has not gone undiscussed. However, policy-makers believe it to be economically unfeasible at this time [87]. If a government owned medical care system were to be embedded within the present economic system one would anticipate the types of problems that are occurring in the Ivory Coast. There, a state owned free medical service has been organized within a free market economy. In her study of the Ivorian system, Lasker discovered a lot of dissatisfaction among health workers (including physicians) with respect to "their relative powerlessness when compared to those outside the profession" [88]. Other occupational groups were free to accumulate wealth in the



private sector and locate their offices where they wished. The outcome of this feeling of relative deprivation was apathy, abandoning the profession or combining medicine with other activities such as politics and commerce.

### CONCLUSION

I have sought to show that the structure and effectiveness of medical services reflect changes in the political and economic conditions of a nation. This was done by tracing the development of medical care in Nigeria as it has been influenced by the pre-colonial, colonial and post-colonial contexts. The major changes in the organization of medical care came with colonial domination. Little has changed since then, although there is now a growing interest in integrating the two competing medical systems. The exact form this integration will take is still open to question.

The insights gained through studying cultural values and the social characteristics of users and/or providers (common within the structural functionalist tradition) become more useful when analyses also take into consideration the political and economic environment of the units under study. For example, to develop preventive health programmes acceptable to non-Western populations, it is known that care must be taken to understand the traditional theories of disease causation, disease expression, and indigenous treatment methods. It is equally important, for the effectiveness of these programmes, to develop industrial enterprises which do not help to overburden the medical services. There is thus a need to analyze the politico-economic constraints on the medical subsystem.

### REFERENCES

1. Parsons T. *The Social System*. pp. 428-479. Free Press, New York, 1951.
2. Read M. *Culture, Health and Disease*. Tavistock, London, 1966.
3. Lambo T. A. Traditional African Cultures and Western Medicine. In *Medicine and Culture* (Edited by Poynter F.), pp. 201-210. Wellcome Institute of the History of Medicine, London, 1969.
4. Maclean U. *Magical Medicine: A Nigerian Case Study*. Penguin Books, New York, 1971.
5. Ojo G. A. *Yoruba Culture*. Univ. London Press, London, 1966.
6. Fromm E. *Marx's Concept of Man*. Frederick Ungar, New York, 1961.
7. Draper P. et al. The organisation of health care: a critical view of the 1974 reorganisation of the National Health Service. In *An Introduction to Medical Sociology* (Edited by Tuckett D.), pp. 254-290. Tavistock, London, 1976.
8. Stark E. The epidemic as a social event. *Int. J. Hlth. Serv.* 7, 681, 1977.
9. Although Lagos was annexed in 1861, the British still had to penetrate the South. Only in 1906 was Lagos amalgamated with the Southern Nigeria Protectorate.
10. Davidson B. *Africa in History*, pp. 138-714. Paladin Books, Frogmore, St Albans, 1966.
11. Hogben S. J. *The Islamic States of Northern Nigeria*. Ibadan Univ. Press, Ibadan, 1967.
12. Davidson B. *Op. cit.*, p. 715.
13. Ojo-G. A. *Op. cit.*, pp. 218-223.
14. Parsons T. *Sociological Theory and Modern Society*. Free Press, New York, 1967.
15. Lewis G. *Knowledge of Illness in a Sepik Society*. Athlone, New Jersey, 1975.
16. Fadipe N. A. *The Sociology of the Yoruba*, pp. 186-187. Ibadan Univ. Press, Ibadan, 1970.
17. Horton R. On taking the enemy's Measure. In *The Tradition Background in Medical Practice in Nigeria* (compiled by Institute of African Studies), pp. 38-45. Ibadan University, Ibadan, 1971.
18. Twumasi P. A. *Medical Systems in Ghana*, pp. 37-41. Ghana Publ. Corp., Accra, 1976.
19. Waitzkin H. B. and Waterman B. *The Exploitation of Illness in Capitalist Society*, pp. 66-86. Bobbs-Merrill, New York, 1974.
20. Lasker J. N. Health care and society in the Ivory Coast: an approach to the study of National Health Systems, p. 2. Unpublished Ph.D. dissertation, Harvard University, Cambridge, MA, 1976.
21. Lloyd P. C. The political structure of African kingdoms: an exploratory model. In *Political Systems and the Distribution of Power* (Edited by Banton M.), p. 75. Tavistock, London, 1965.
22. Johnson O. *The History of the Yoruba*, pp. 121-122. Negro Univ. Press, West Port, 1921.
23. Johnson O. *Ibid.*, p. 122.
24. Talbot P. A. *The Peoples of Southern Nigeria*, Vol. II, p. 155. Cass, London, 1969.
25. Fadipe N. A. *Op. cit.*, p. 300.
26. Talbot P. A. *Op. cit.*, p. 155.
27. The Federal Ministry of Health. *Annual Report on the Medical Services for The Year 1953-4*, p. 6. Govern. Printer, Lagos, 1955. It was reported that Dr O. Sapara, who worked in the government service as a physician between 1896 and 1927, had secretly infiltrated the cult to learn its secrets.
28. Rodney W. *How Europe Underdeveloped Africa*. Tanzania Publ., Dar-es-Salaam, 1972.
29. Gutkind P. C. *The Emergent African Urban Proletariat*. Center for Developing Area Studies, Occasional Papers Series, No. 8. McGill University, Montreal.
30. Onoge O. F. Capitalism and public health: a neglected theme in the medical anthropology of Africa. In *Topias and Utopias in Health*, pp. 219-232. Moutom, The Hague, 1976.
31. Williams G. W. A political economy. In *Nigeria: Economy and Society* (Edited by Williams G.), pp. 11-54. Collings, London, 1976.
32. Schram R. *A History of The Nigerian Health Services*, p. 101. Ibadan Univ. Press, Ibadan, 1971.
33. Schram R. *Ibid.*, p. 101.
34. Ogunlesi T. O. Health Programmes for the Nation. In *A Health Programme for the Nation* (A bulletin of The Nigerian Medical Association), p. 16. Okwesa, Lagos, 1966.
35. Fainstein S. and Fainstein N. City Planning and Political Values. *Urban Aff. Q.* 6, 341, 1970. The Fainsteins outline four approaches to planning: (1) traditional, (2) user-oriented, (3) advocacy and (4) incremental. Each is associated with a particular view of society and political orientation. Traditional Planning is associated with the technocratic approach to society and aristocratic/paternalistic values.
36. Broady M. The social context of urban planning. *Urban Aff. Q.* 4, 355, 1969.
37. Harkness J. W. P. and Walker G. B. Development of health services in Nigeria: A 10-year plan (1946-1956). In *A Health Programme for the Nation* (Bulletin of the N.M.A.), p. 124. Okwesa, Lagos, 1966.
38. Minister for Public Health (no name given). Public Health Policy for the Western Region, Nigeria. In *A Health Programme for the Nation* (Bulletin of the N.M.A.), p. 142. Okwesa, Lagos, 1966.



39. Twaddle A. The concept of health status. *Soc. Sci. Med.* 8, 29, 1974.
40. Waitzkin H. B. *Op. cit.*, pp. 65-86.
41. Lasker J. N. The role of health services in colonial rule: the case of the Ivory Coast. *Cult. Med. Psychiat.* 1, 277, 1977.
42. Schatzkin A. Health and labor power. *Int. J. Hlth. Serv.* 8, 213, 1978.
43. The Federal Ministry of Health. *Annual Report on the Medical Services for the year 1953-4*. *Op. Cit.*, p. 5.
44. Schram R. *Op. cit.*, p. 352.
45. The Federal Ministry of Health. *Op. cit.*, p. 15.
46. The Federal Ministry of Health. *Annual Report 1960-1962*, p. 26. Nigerian Nat. Press, Apapa, 1962.
47. Lasker J. N. *Op. cit.*, pp. 290-292.
48. Turshen M. Impact of Colonialism on Health and Health Services in Tanzania. *Int. J. Hlth Serv.* 7, 7, 1977.
49. Schram R. *Op. cit.*, p. 223.
50. Logan M. I. The spatial system and planning strategies in developing countries. *Geogr. Rev.* 62, 229, 1972.
51. Williams G. W. *Op. cit.*, pp. 11-54.
52. Ohonbamu O. *The Psychology of The Nigerian Revolution*, pp. 19-20. Stockwell, Devon, 1968.
53. Ekundare R. O. *An Economic History of Nigeria 1860-1960*, p. 358. Methuen, London, 1973.
54. The Federal Ministry of Health. *Annual Report for 1957-9*, p. 21. Govern. Printer, Kaduna, 1962.
55. Maclean U. *Op. cit.*, p. 60.
56. Olusanya G. O. *The Second World War and Politics in Nigeria: 1939-1953*, pp. 151-152. Evans Bros. London, 1973.
57. Stapleton G. B. *The Wealth of Nigeria*, p. 98. Oxford Univ. Press, Oxford, 1967.
58. Schram R. *Op. cit.*, p. 341.
59. Tuckett D. Introduction. In *An Introduction to Medical Sociology* (Edited by Tuckett D.), p. 31. Tavistock, London, 1976.
60. Krause E. A. *Power and Illness*, pp. 9-30. Elsevier, North Holland, New York, 1977.
61. Agbaje A. S. Private medical practice in general, and private practice in government and allied medical institutions in particular. In *A Health Programme for the Nation* (Bulletin of the N.M.A.), pp. 87-91. Okwesa, Lagos, 1966.
62. The Ministry of Economic Planning and Reconstruction. *Annual Digest of Medical and Health Statistics*, p. 13. Government Printer, Ibadan, 1968.
63. Agbaje A. S. *Op. cit.*, p. 87.
64. Freidson E. L. *Patients' Views of Medical Practice*, pp. 202-205. Russell Sage, New York, 1961.
65. The Regional Committee for Africa. *Traditional Medicine and Its Role in the Development of Health Services in Africa*, p. 12. W.H.O. Document, Kampala, 1976.
66. Hughes C. C. and Hunter J. M. Disease and development in Africa. In *The Social Organization of Health* (Edited by Dreitzel H.), pp. 168-174. Macmillan, New York, 1971.
67. Gutkind P. C. *Op. cit.*, pp. 14-22.
68. Schram R. *Op. cit.*, p. 263.
69. Markovitz I. L. *Power and Class in Africa*, p. 205. Prentice Hall, New Jersey, 1977.
70. Adebayo A. O. *Policy-making in Nigerian public administration*. Unpublished paper, Department of Public Administration, Ife, 1978.
71. Okediji F. O. Economics of health care. In *Priorities in National Health Planning* (Edited by Akinkugbe O. O. et al.), pp. 110-118. Caxton, Ibadan, 1973.
72. Shehu U. Priorities in health care. In *Priorities in National Health Planning* (Edited by Akinkugbe O. O. et al.), pp. 23-27. Caxton, Ibadan, 1973.
73. Popoola J. O. Evils of private practice P.Y. *Sunday Sketch* Ibadan, May 1, 1977.
74. Jose B. Doctors and charlatans. p. 3. *Daily Times*, Lagos, Feb. 16, 1978.
75. Shaw T. M. The political economy of African international relations. *Issue* 5, 29, 1975.
76. Aboyade O. *Issues in the Development of Tropical Africa*, pp. 86-89. Ibadan Univ. Press, Ibadan, 1976.
77. Green H. A. *The Management of Urban Development in Nigeria*, p. 94. Univ. Ife Press, Ife, 1976.
78. Mabagunje A. L. Urbanization Problems in Africa. In *Urbanization, National Development and Regional Planning in Africa* (Edited by El-Shakhs S. and Obudho R.), pp. 13-26. Praeger, New York, 1974.
79. El-Shakhs S. Development Planning in Africa: An Introduction in *Urbanization National Development and Regional Planning in Africa* (Edited by El-Shakhs S. and Obudho R.), pp. 5-6. Praeger, New York, 1974.
80. Kuti A. O. Preventive vs curative medicine. In *Priorities in National Health Planning* (Edited by Akinkugbe O. O. et al.), pp. 58-62. Caxton, Ibadan, 1973.
81. Alli O. What degree of protection for the workers? p. 17. *Daily Times*, Lagos, March 11, 1977.
82. Personal Communication with Dr S. Osoba who is engaged in a Study of School facilities in Ife town. May, 1978.
83. The Central Planning Office. *Third National Development Planning 1975-1980 (Nigeria)*, p. 266. Govern. Printer, Lagos, 1975.
84. Field M. Stability and change in the medical system. In *Stability and Change* (Edited by Barber B. and Lukeles A.), p. 32. Little Brown, Boston, 1971.
85. Illich I. *Medical Nemesis*. Marion Boyars, London, 1975.
86. Ekundare R. O. *Op. cit.*, p. 383.
87. Personal communication with Mr A. Adewolu, Assistant Director of the Ife University Hospital Complex. Mr Adewolu indicated that the idea had been brought to the attention of government officials, Feb. 1978.
88. Lasker J. N. *Op. cit.*, p. 215.
89. I would like to thank Tunde Odetola, Simi Afonja and Segun Osoba for their helpful comments on an earlier draft of this article. I would also like to thank Judith Lasker for the conversations on her research in the Ivory Coast.

## ṚTU-SĀTMYA: THE SEASONAL CYCLE AND THE PRINCIPLE OF APPROPRIATENESS\*

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**Abstract**—We address ourselves here to the logical frame of prognosis and treatment, in classical Hindu medicine. The Sanskrit medical texts set forth two different cycles of the seasons. The one which includes *the dewy season* is of distributive type. Every season has specific qualities antagonistic to the other ones. This provides the physician with a logical scheme according to which he may prescribe medicines compensating for an adverse excess. The other one which includes *the first rains* is of evolutive type. To the only three seasons effective in India—winter, summer, rains—, each one giving rise to a specific trouble—phlegm, wind, bile—, three other ones are added which represent transitional phases. The medical treatment adapts itself to the course of time, improving the transient seasons—spring, first rains, autumn—which are the only ones fit for the major treatments in nursing-homes. The course of time logically reconstructed will determine the selection, the appropriateness of a medical prescription.

Ayurvedic medical treatises abound in prescriptions concerning what is "appropriate" (*sātmya*) to various times and places, and the word *sātmya* itself, which can be either an adjective or a noun (meaning "appropriateness"), belongs to the specialized language of those treatises. The seasonal cycle is an application of this principle. Each treatise contains at least one chapter devoted to seasonal variations in the "regulation of life according to the season" (*ṛtu-caryā*). Beneath the constant flow of specific items, one can discover some fundamental notions that justify the cyclical arrangement of landscapes, the cyclical succession of climates, illnesses, remedies, or bodily techniques. All these presuppose a particular conception of the relationship between a living being and its life-environment.

I will indicate briefly what Renou [1], in a valuable study on the theme of the seasons, calls "the classical order of things". The year is made up of a set of six seasons: *varṣā* (the rainy season), *śarad* (autumn), *hemanta* (winter), *śiśira* (the cool season or season of frosts), *vasanta* (spring), *grīṣma* (summer), each of which was traditionally associated by the poets with a certain flower, a certain bird, such and such a state of mind. In the famous poem the *Rtusamhāra*, attributed to Kālidāsa, for example, we find the sequence of the birds: in the summer the peacocks are masters of the serpents; in the rainy season cātaka (black and white cuckoos) feverishly await the first drops of rain, which are followed by the passionate dance of the peacocks; but with the cooling of autumn the peacocks tire of their dance, and the drunkenness of love (*madana*) abandons them for the swans (*haṁsa*); the song of the curlew (*krauñca*) marks winter and the season of frosts; and the song of the *kokila* (Indian cuckoo), drunk on the sap of the mango tree, announces the coming of spring. Spring is contrasted with autumn,

and summer, with its mirages and forest fires, with the rainy season's new grass, the time of the elephant's drunkenness.... Enumerations of the six terms of the classical cycle are rarely complete and even the order in which they are listed may vary. There is no fixed first season in such enumerations.

If the *theme* of the seasons is an indispensable element of Hindu poetry (*kāvya*), the cycle of the seasons is even more indispensable to Hindu medicine (*āyurveda*) and astrology (*jyotiṣa*). It allows the therapist and the astrologer to make use of the transformations possible from term to term. Each season is characterized by a set of signs (*lakṣaṇa*), flavors (*rasa*), and qualities (*guṇa*), which require appropriate varied observances, habits, and regulations of life.

Seen in its specifics, the seasonal cycle thus seems to be composed of various small, partial cycles. Just as in the seasonal rounds of classical poetry, where one can determine a cycle of birds, or flowers, etc. so in the medical texts there unfolds a cycle of meats, or soups, or sexual activities, etc. But before analyzing this set of *ethnographic* information, we must attempt to define the more or less philosophical *notions* under which the concrete data are arranged. We should first discuss how the idea of *ṛtu-sātmya*—appropriateness to the articulations of time—came to be an essential part of the Hindu tradition. Next we shall look at some new questions raised by the form of the seasonal cycle. Concrete things (such and such foods or gestures) are in fact found to be enfolded in a system of technical terms, in a conceptual framework made up of *circular* series: the three humors (wind, bile, and phlegm), the six flavors, etc. Finally it will be possible, regarding some specific items, to define *sātmya*—appropriateness—as a play of oppositions and complementarities among contrasting humors, flavors and qualities. Here *sātmya* can be understood as a principle of compensation and accommodation. We will limit our references to the major classical *samhitās*, the medical treatises of Suśruta, Caraka and Vāgbhaṭa.

Although the expression *ṛtu-sātmya* is purely Ayurvedic, its roots descend into the most ancient layers of Hindu tradition. The idea of appropriateness to the articulations of time originates in the Vedic doctrine

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of the sacrifice. We must refer here to Renou's article [1] on the etymology of *ṛtu*, as well as to Lilian Silburn's doctoral thesis [2]. We will summarize the exemplary pages in which Mme Silburn interprets the Vedic *ṛtu* as "an articulating activity" from which there results the *ṛta*, that which is articulated, the well ordered cosmos, or regulated repetition. This coordinating intention is called *kratu* (a Vedic word for "sacrifice"), meaning a convergence (*samaya*) of events or acts, an adjustment of times, spaces and actions—and this is what is put into operation within the sacrifice. The sacrificer simply takes up again the work of Agni, the solar guardian of the *ṛtus*, the master of sacrificial actions and occasions. The word *ṛtu* means first a facilitating power, an articulating activity. Subsequently it designates the crucial instant, the moment in the midst of the sacrifice when the convergence of acts is most effective. It means act and moment fused.

This was the case in the Vedic period. A shift in the latter meaning takes us from the active notion of a structuring *ṛtu* to a passive notion of "repetition" or "periodicity". In classical texts *ṛtu* signifies the season, or even the "periods" of women. Yet the first conception of time was that of a moment in process, or of discontinuous instants; and the abstract notion of time as a continuum is secondary and subsequent. Prajapati, the Sacrifice as a god, is the "Year" (not "time"); that is to say, he is that articulation of the seasons which is effected by rituals. Sacrifice is conceived as a reconstruction of Prajapati, a continual reestablishment of the order of the seasons, a positing of the Year (*saṃvatsara*) as cycle of seasons and matrix of temporality. The original notion is that of the Year, the cycle of the seasons. The idea of time (*kāla*), conceived as autonomous and self-subsistent, is not a primary notion.

It thus seems quite natural that in the classical Ayurvedic medical texts the expression *kālasātmya*, "appropriate to the time", should find itself in competition with another expression which, while synonymous to it, is both more precise and more deeply rooted in tradition—*ṛtu-sātmya*, "appropriate to the season". A philosophical conception of time, as underlying the successive changes that constitute diseases, determines both climatic descriptions and therapeutic prescriptions. This is clearly shown in the beginning of the "*Ṛtucaryam*" chapter of the *Suśruta-saṃhitā*: *kālo hi nāma svayambhvanādīmadhyanidhanah*.... "That which we call time, self-subsistent, without beginning, middle or end..." [3]. There is a "nature proper to time" (*kālasvabhāva*), which is to cause change in beings and to make diseases follow continually on one another. One example will be enough to show this competition between *kāla* and *ṛtu*, at least on the level of vocabulary. One of Suśruta's lists of "appropriatenesses" begins:

*sātmyāni tu deśakālaṭyārturogarvāyāmodakadivāsvapna-rasaprabhṛtini prakṛtivriddhāny api yāny abādhakarāṇi bhavanti.*

"Those place, time, class, season, disease, physical exercise, water, siesta, flavor, etc., are appropriate (*sātmya*) which, while they are contrary to the (patient's) constitution, will not cause any trouble" [4].

We will return to this idea that the appropriate

circumstances, elements, or acts are contrasting influences that are to be compensated for or neutralized. For now we will simply note the redundancy between *kāla* and *ṛtu*. Dalhana's commentary (the standard authority) glosses each term in the series, including *ṛtu*, but skips *kāla*. The latter term thus seems to be motivated by a kind of banal parallelism: place... and so you must have time. But the technical term is indeed *ṛtu-sātmya*.

"What *sātmya* means", says the commentator Dalhana, "is that which gives ease to the *ātman*", *sātmyam ātmasukhaṃ yat karoti tad ucyate* [5]. *Ātman* refers to the "self" of the sick person. This connotation is quite well rendered in some English translations by the adjective "congenial"—what is "connatural", as we would say, to the sick person's self, the remedy appropriate to his case, a diet or physiotherapeutic program which the doctor has reasoned out to fit the patient's nature. It is thus clear that there is no question of adapting the person to his environment, but rather of proceeding in the opposite direction—appropriating external conditions to the exigencies of the case to be treated, appropriating them to the sick person himself. This kind of therapy aims to modify the idiosyncrasies of the patient by giving him good habits. The means of effecting this sort of appropriateness are of two sorts, food and medications on the one hand—their actions being of the same order (assimilation by the organism of substances bearing therapeutic virtues)—and bodily techniques on the other hand (physical exercise, daytime rest, unctions, etc.).

According to the passages that we have cited, it appears to be space, time, etc. which are appropriated to the nature of the patient by means of a regulation of his life. Nevertheless, the most frequent formulation is *deśa-sātmya*, "appropriate to the place", or *kāla-sātmya*, "appropriate to the time", etc. as if the direction of the process were reversed, as if space, time, etc. were no longer to be made appropriate, but were themselves taken as models for what is appropriate for the person to be. And Dalhana, glossing each word in the above passage, makes each a compound by adding the suffix *-sātmya* [5]. For example, *ṛtusātmyaṃ yathā—ṛtvabhihitam annapānādi*. "That which is appropriate to the season, to wit: food, drink, etc. designated by the season". There is a difficulty or an ambiguity here attaching to the fact that each of the features to which there is or is not to be appropriateness (space, time, etc.) is both subjective and objective. Thus on the one hand we have time as it is experienced by the sick person (the different phases of a disease), and on the other hand the objective framework of time (the seasonal cycle). The only aspect of time on which the doctor can act is time as lived by the patient, the evolutionary rhythm of his humors, his troubles. In this sense, the prescribed regulation is indeed an appropriation of time. But otherwise the objective calendar constitutes a framework that must be respected: the regulation and the remedies must thus be made appropriate to the time.

It is in this sense that Caraka, in defining time as a factor to be considered in prescribing a diet, distinguishes two meanings of the word *kāla*, "time": *kālo hi nityagaś cāvasthikaś ca/tatrāvasthiko vikāram apekṣate, nityagas tu ṛtusātmyāpekṣah*;; "Time is both the time that is perpetually flowing (*nityaga*) and time

as a phase (*avasthika*); in this case, time as a phase has to do with a particular disease, while time which is perpetually flowing has to do with becoming appropriate to the seasons" [6]. Thus on the one hand we have time as universal flow, and, as we shall see, as the power of change (*pariṇāma*); this view of time is nothing other than the year, the cycle of the seasons (*saṃvatsara*). On the other hand we have the developmental rhythm of a disease, the various phases of accumulation or disorder of humors, the moments which are auspicious for a particular therapeutic action: this is lived time, unique to each patient. Thus Caraka repeats: *kālāḥ punaḥ saṃvatsaraś cātūrāvasthā ca*; "Again, time is both the cycle of the seasons (*saṃvatsara*) and the phases of a disease (*cātūrāvasthā*)" [7]. The doctor's task is thus to formulate an alimentary, gymnastic, climatic, etc. regimen in such a way that it will be appropriate both to such and such a phase of the sickness and to such and such a season, and thus restore accord between the patient and his life-environment, an accord that the sickness had broken.

In relation to the doctrine of the "three humors" (*tri-doṣa*), health is often defined as an equilibrium or an "equity" between wind (*vāta*), bile (*pitta*) and phlegm (*kapha*). The rule to follow, Suśruta says at one place, is to add to the humors that are too weak, calm those that are excited, and safeguard those that are "equal" or "congruent" (*sama*) [8]. Even more than an idea of equilibrium, an idea of congruence imposes itself, and a whole cluster of words constructed out of *yoga* or *saṃyoga*, "junction," "connection," specify this program of medical work, which is to arrange appropriate relations—"congruent articulations" (*sama-yoga*)—between the patient and his life-environment. One particularly interesting paragraph of Caraka specifies this program and makes an inventory of this vocabulary, in relation to a definition of time as change or as the power to disorganize all congruences:

*Śiṣṭoṣṇavarśalakṣaṇāḥ punar hemantagrīṣṇavarśāḥ saṃvatsaraś sa kālāḥ/tatrātimātrasvalakṣaṇāḥ kālāḥ kālātiyogāḥ, hinasvalakṣaṇāḥ (kālāḥ) kālāyogāḥ, yathāśvalakṣaṇaviparitalakṣaṇas tu (kālāḥ) kālāmithyāyogāḥ/kālāḥ punaḥ pariṇāma ucyate/ity asātmvendriyārthasaṃyogāḥ, prajñāparādhāḥ, pariṇāmas ceti trayas trividhaviikalpā hetavo vikārāṇām/samayogayuktās tu prakṛtihetavo bhavanti/sarveśām eva bhāvānām bhāvābhāvau nāntareṇa yogāyogātiyogamithyāyogam samupalabhyete/yathāśvayuktyapekṣināu hi bhāvābhāvau//*

"The year consists in (a cycle of the seasons) Winter-Summer-Monsoon, these being respectively characterized by cold, heat, and rain. This is what constitutes time (*kāla*). If now a (particular) season (*kāla*) manifests its characteristics excessively, there is an excessive junction (*atiyoga*) with the time; if it manifests its characteristics insufficiently, there is an insufficient (or non-) junction (*ayoga*) with the time; but if the characteristics that it presents are contrary to its normal characteristics, there is a bad junction (*mithyāyoga*) with the time. Furthermore, time is called *pariṇāma*, change. Thus the inappropriate junction (*asātmya*) of sense organs with their objects, errors of judgement, and change—these are the three causes of sicknesses, each cause being subdivided again into three. Inversely, the establishment of congruous junctions (*samayoga*) is the cause of good health. Good and bad states of all things are never independent of these junctions—insufficient junctions, excessive junctions, bad junctions. For good and bad states depend on their respective conjunctions (*yukti*)" [9].

What is in question here is above all objective time, clearly identified with the seasonal cycle, a cycle here reduced to three terms (the three "extreme" seasons, as we shall see), and in particular time conceived as the play of a causality that destroys all *yoga*, all the junctions, i.e. all the regulations that constitute an accord between a living being and his life-environment. The doctor is unable to act upon this objective time. In another passage, where Caraka enumerates the various factors determining therapeutic action (including the time), we find the exact repetition of a formula cited above: *kālāḥ punaḥ pariṇāma ucyate*; "again, time is called change" [10]. The commentary of Cakrapāṇidatta is invaluable here: *pariṇāma iti pariṇāmi rtvayanādirūpaḥ kālāḥ/tena nityagaṃ kālāṃ nirasyati, tasya sarvasādhāraṇatvena kāryaṃ praty anapekṣanīyatvāt//*; "change: what causes change is the time which consists of seasons, years, etc. In this way the author rejects *nityaga* time, which, since it is common to everyone, does not enter into the calculations (*anapekṣanīya*) for determining action (*kāryaṃ prati*)". In other words, time as a cause of sickness is *nityaga* or *pariṇāma* time, objective time, the time that is common to all; while time as a factor determining the modalities and the opportunity for a particular medical treatment is *avasthika* time, subjective time, the developmental phases of the sick person's humors. Sickness is a kind of being-out-of-phase, and medicine an art of good conjunctions—maintaining or restoring in each particular person a good use of the time that is common to all.

Caraka presents the classical order of things at the beginning of his treatise, in the chapter entitled *tasyāśītiya*: in this enumeration of the six seasons, he keeps *śiśira* (the seasons of frosts) and leaves out *prāvṛṣ* (the beginning of the rains); in the medical texts, this arrangement is in competition with another one which, as we shall see, includes *prāvṛṣ*. Translating its first words, this chapter "is concerned with that one (*tasya*) whose strength and color are increased by the food eaten, etc. (*asītādyād āhārād*), because he knows what is appropriate to the season (*rtusātmyam*) as far as bodily practices (*ceṣṭā*) and foods are concerned" [11].

Through his food, habitat, and bodily techniques, the living being is influenced, penetrated, immersed in the system of humors, flavors and qualities that makes up the atmosphere, the climate, the landscape in which he takes root. *Rasa*, a juice formed in the living body from all the substances assimilated by digestion, is first present in food, drugs, and plants (*oṣadhi*). The sap (*rasa*) of plants comes from the combination of rainwater with the other major elements (*mahābhūta*), earth, fire, air, ether. The Sun "captures" the *rasa*, and the Moon, "Master of *oṣadhi*," exudes or frees the *rasa*. The combination of water with the other elements produces six "flavors" (*rasa*): sweet (*madhura*), sour (*amla*), salty (*lavana*), acrid (*katuka*), bitter (*tikta*), astringent (*kaṣāya*), following the traditional order of recitation of this hierarchic series of technical terms. Thus the relations between a living being and its natural life-environment give birth to a vast metabolism of saps and foods. One flavor predominates in each season, and each flavor provokes the accumulation (*saṃcaya*) or disorder (*prakopa*) of one of the three humors (*doṣa*), wind, bile, phlegm



Fig. 1. Annual cycle of fluids (*rasa*).

(*vāta*, *pitta*, *kapha*), following the cycle laid out in Fig. 1.

The year is divided into two series of three seasons each: rains—autumn—winter, and frosts—spring—summer. The first corresponds to the Sun's movement toward the South: it is the *saumya* period, wet and cold. The second is marked by the Sun's movement northward: the *āgneya* period, hot and dry. Two half-year periods, one called "release" (*visarga*)—the Moon emits *rasa* at this time—and the other "capture" (*ādāna*)—when the Sun takes all the *rasa*, all the sap of beings, "back to himself" (*ā-datte*) [12]. In one period the Moon is predominant: the winds don't blow too strongly, and the Moon whose power is unchecked perpetually "fattens" (*āpyāyati*) the world on his cold beams. The other period is dominated by the Sun and the wind, who together destroy all the *sneha*, all the unctuousity and softness of the world, and imposes *rūkṣa*, the dry and harsh. At this time human beings lose their strength; and the extreme term of this progressive weakening, the moment of greatest weakness, is the summer solstice.

The cycle in Fig. 1, following the beginning of the *Carakasamhitā*, is a composite one, and its coherence is problematic. It will be noticed, for example, that *hemanta* and *śiśira* overlap, since both of these "two" seasons are marked by the accumulation of phlegm. The rainy season, *varṣā*, is inversely overdetermined, since it is both a period of accumulation (of bile) and a period of troubles (of wind): the alternation between periods of accumulation and disorder is thus imperfectly realized in this arrangement of the cycle, and we can already foresee other possible arrangements better suited to symmetry. In this version, the six *rasa* are the essential element [13]. This is a possible reason for the popularity of this schema outside the Ayurvedic medical tradition, in other branches of

Sanskrit literature, and especially in *kāvya*. The series of six *rasa* (in the strictly Ayurvedic sense of the word) produces a regular distribution of seasonal "atmospheres" or "flavors", which provides the poetic theme for a series of "tableaux", each of which has a particular affective tonality [14]. Medicine and poetry are the two provinces of a single encompassing tradition: this was already demonstrated by Louis Renou who, in the article cited above, drew his proofs from a comparison of medical doctrines and poetical treatises like the *Kāvya-mīmāṃsā*, etc. To take only one example of this intimacy between medicine and poetry, we can cite the famous round of the seasons of the *Raghuvamśa*, Book XIX, vv. 37-47. The cycle of the seasons here appears as a framework necessary for the poet to make understandable that physical and moral decline whose fatal progress is achieved in the heart of summer (the period of greatest weakness, as we have seen) by means of the "royal consumption" (*rājayakṣman*), a fundamental category of traditional pathology. A king who abandons his dharma and plunges into debauchery will be the victim of a more than medical sickness, a consumption or dessication of his existence, a sort of ontological disease, one which we would be mistaken to reduce flatly to phthisis. All the *rasa*, all the unctuousity that constitutes life disappears. In the Vedic texts this malady involves sin (*pāpa*); in *smṛti*, it brings the king's dharma into question. . . . Here is a point *par excellence* where all the threads of tradition are knotted together. At this level "medicine" and "poetry" cannot be distinguished.

But we must note that the annual cycle of predominance of *rasas* is not the same as the annual cycle of *doṣas*. In the medical texts themselves, we find at least two competing seasonal cycles. Both Caraka (*vimānasthāna*, Chap. 8) and Suśruta (*sūtrasthāna*, Chap. 6)

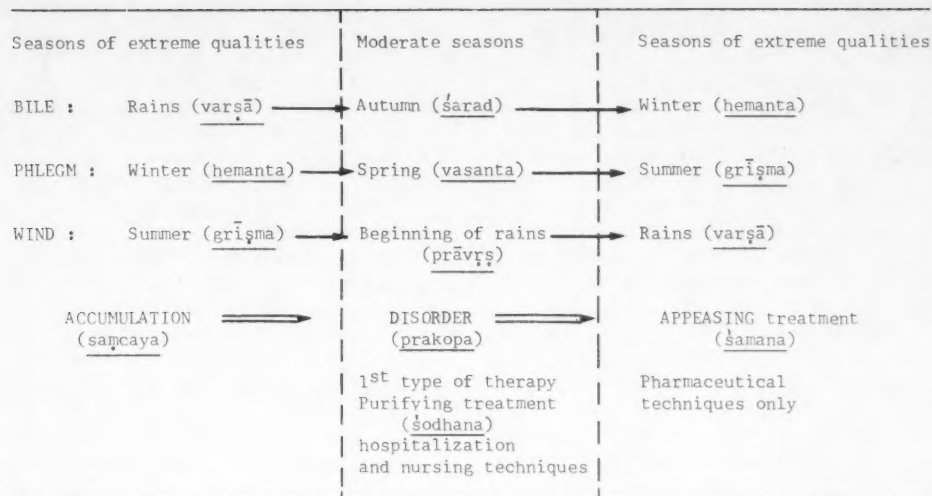


Fig. 2. Medical cycle.

present a cycle in which *śiśira* (the cool season) disappears, and *prāvr̥ṣ*, "the beginning of the rains", is added. This is sketched out in Fig. 2, following Hoernle, who was probably the first to compare accurately the two forms of the cycle [15].

In the difference between the two forms of the cycle, Rudolf Hoernle saw an opposition between the *civil year* and the *medical year*; this was probably because he considered only the second schema to be authentically medical, since it is the one based on the seasonal evolution of diseases. It might be more appropriate to consider both schemata as equally pertinent, noting simply that they perform different roles. The first schema that we looked at was *distributive* in form, presenting each season equally. In the third part of this study we will return to this version, since it provides a framework for the inventory of the different regimens (of food, clothing, etc.) characteristic of each season. The second schema is, on the other hand, *transitive* in form: it explains the *evolution* of humors and diseases by the action of distant causes, it justifies the *recurrence* of symptoms of a particular season in the next one, phenomena in which we see the most clearly the maturational power of time: aggravations and improvements; the phlegm accumulated in winter causes problems in the spring, but should normally ease off in summer, etc.

This cycle is important for two reasons. On the one hand, it determines the choice between the two great categories of purely medical therapy (with surgery lying completely outside this scheme): *śodhana* (literally "purifying") therapy and *śamana* (literally "quieting") therapy. This opposition is fairly congruent with that between clinical and pharmaceutical medicine. In one case, *hospitalization* and the application of emetics, purgatives, sudatives, etc. In the other case, a simple prescription of *medicines* to be taken orally or externally, but always at home. In principle, the great Ayurvedic cures which require hospitalization and the mobilization of complex procedures (called *śodhana-cikitsā* or *pañcakarman*) can be undertaken only dur-

ing the "moderate" seasons: when it is neither too hot nor too cold, too dry nor too wet, etc.

This cycle is also important for the geographer or the anthropologist who is seeking to identify the connections between what he can observe on the ground and what is said in the classical Sanskrit texts. Anyone who has experienced the Indian climate, more specifically, knows that spring and autumn appear as fleeting, almost imperceptible, periods. There are in fact *three* true seasons: winter, the hot season, and the monsoon. In the texts, the cycle is often presented in just this form: reduced to three terms, to the three "extreme" seasons, "very" or "too" (*ati-*) cold, hot, or rainy: winter (*hemanta*), summer (*grīṣma*), monsoon (*varṣā*). How then can we interpret the texts' presentation of three supplementary and intermediate seasons, with "moderate characteristics" (*sādhāraṇa-lakṣaṇa*)? They probably represent the intermediate and fleeting periods which mark the transitions between the three strongly-defined phases of rigorous cold (in northern India in winter), torrid heat, and the monsoon deluges. The moderate seasons, in other words, fall when it is *not yet* too cold, hot or wet, or in other words, when it isn't too cold, hot or wet *any more*. In this perspective, Vāgbhaṭa's prescriptions concerning the "juncture of the seasons" (*rtu-saṃdhi*) take on a very concrete meaning. The transition, he says, must be gradual and not abrupt, lest problems arise "because of non-appropriateness" (*asātmīyaja*) [16]. In the last seven days of one season and the first seven days of the next, the regulation of life appropriate to the first gradually gives way to its successor. We could postulate a *ritual* source for these prescriptions, for in ritual, as we mentioned at the beginning of this study, we find a fundamental need to order the articulations of time. But isn't the more general idea simply to compensate for the excesses of the strong seasons by taking advantage of their alternation?

We have seen that time has two different aspects: an objective one (the seasonal cycle) and a subjective

one (the phases of a disease). But both of these are explained in the same way: by the changing of humors, normally following a three-part cyclic rhythm: accumulation (*samcaya*), disorder (*prakopa*), appeasement (*śamana*), a rhythm which in abnormal situations may become blocked or entangled, producing a disease. The distinction between the two aspects of time is, for the doctor, a methodological one. On the one hand, the seasonal cycle gives him a framework for prognosis and hygiene; on the other hand, each phase of a sickness is a critical moment. Thus we have on one side the time of prevention, on the other the time of emergencies. The phlegm that has accumulated in winter should normally lose its dangerous force in the summer; the wind that has accumulated in the summer . . . etc. One excess cures another. An appropriate alimentary and gymnastic program is usually enough to make minor ailments improve "spontaneously" (*svabhāvatas*). If *śodhana* treatments are prescribed for the juncture between excesses, in the intermediary periods between the three extreme seasons, this is above all as preventive medicine. But in an emergency, in a serious crisis that requires immediate treatment, the cycle of the seasons can no longer be taken into account. In such a situation, medicine is able to recreate, artificially and against the flow of time, a propitious environment. Thus when Vāgbhaṭa states the rule that *śodhana* treatment (emetics, purgatives, sudorifics, enemas, etc.) should be undertaken in a moderate season, he specifies: this rule applies "to the regulation of the life (*vr̥tta*) of a person in good health", *svasthavṛttam abhipretya* [17]. But in an emergency, *vyādhai tv ātyayike*, as the commentator says, "when the disease allows no loss of time," it is the state of the sick person that determines the opportunity for action:

*kr̥tvā śiṣṭasnavr̥stinām pratikāram yathāyatham/prayojayet  
kriyām prāptām kriyākālāṃ na hāpayet/*

"First of all, (the doctor) should create a corrective (*pratikāra*) for cold, heat, or rain, depending on which predominates, in order to practice the treatment indicated; he should not let the time for action slip by" [18].

Thus the doctor acts against the current of the seasonal cycle, artificially producing the climate appropriate to the required treatment (required by the particular stage of the disease). This is, if we may say so, an appropriation against the time (*une appropriation du contretemps*). Aruṇadatta's commentary specifies the nature of the corrective to be employed:

*kr̥trimam ṛtugaṇam yathāyatham sampādya saṃśodhanādi-  
lakṣaṇām kriyām prayojayet/kr̥trimagaṇopadhānam ca  
yathā—hemante garbhagr̥hādi, gr̥ṣṇe dhārāgr̥hādi.*

"(The doctor) should practice a treatment such as *saṃśodhana*, etc. only after having created the required seasonal atmosphere; an artificial protection (*upadhāna*) would be, for instance, a room in the center of the house in winter, in summer a room cooled by sprinkling water, etc."

Now it is precisely such compensatory measures, such *pratikāra*, that make up the regimen appropriate to each season: heating in winter, cooling in the summer, etc.

The principle of *ṛtu-sātmya* thus operates on two levels. On the level of preventive medicine, the appropriateness of a life-regime to the articulations of time

is direct. Excesses of cold, heat, or rain are compensated by their own alternations: it is sufficient to follow the rhythm of this alternation (among the three strong seasons), being especially mindful of the transitions (the three intermediate seasons). But on the level of emergency treatment, compensation for climatic excess consists of intervention against time: reference to the cycle of the seasons is indirect, providing only the principle for an artificial procedure of compensating for contrasts.

Correctives, the means of making things appropriate, are of two sorts: foods and bodily techniques. These are sometimes indicated in the texts by a pair of words belonging to everyday language, but taken here in a special sense: *āhāra*, "alimentation," and *vihāra*, "bearing" or "posture" of the body, or often the dual compound *āhāravihārau*, foods and bodily practices. We might say, perhaps over-schematically, that "alimentation" in the larger sense includes medications, and that "bodily techniques" also include physiotherapy, *śodhana* treatments such as bathings, scentings, sleeping positions, etc. Let us attempt to group into categories the seasonal observances whose inventory Caraka undertakes in Chapter Six of the *Sūtrasthāna*, by inserting them into the classical schema of the seasonal cycle—the schema that we have called *distributive*. It now appears to be composed of a plurality of partial cycles: a cycle of soups, a cycle of meats, a cycle of liquors, a cycle of unguents, a cycle of habitats, a cycle of sexual activities, etc. For example, the intensity of sexual activity in winter responds to the intensity of the cold; in spring, one should enjoy "groves and women in flowers" (*striṇām kānanānām ca yauvanam*); but with the coming of summer, a man "should enjoy groves, cold waters and flowers, abstaining from sexual relations" [19]. Another partial cycle is that of aloes and sandalwood. In winter one should practice unctions of aloes (*aguru*), which are warming; in the spring one joins aloes (*aguru*) with sandalwood (*candana*), which is cooling; but in the summer, only the latter is used, in its most refreshing form: that of sandalwood water (*candanodaka*) [20]. Certainly, in the dozens of verses which Caraka here devotes to the inventory of deeds and actions appropriate to the different seasons, identification of the specific items is often very difficult. We can even wonder whether this treatment was ever actually practiced, requiring as it does the wealth and the leisure of a prince. Summer nights on the terrace of the palace, autumn evenings in the moonlight . . . Evidently this is not a collection of empirical recipes, but an imaging of the world as idealized by poetic conventions. The details of these prescriptions are less important than the principles of their grouping: the alternation and compensation of opposites.

This text is far from unique, and a long labor would be needed to inventory all the cycles scattered through chapters on *materia medica* and therapeutics. The cycle of seasonal variation in water quality [21], or the annual cycle of fevers [22], for example, are avatars of the system that we have been studying, being respectively homologous with schemas I and II above. But what is given is often highly conventional, and rarely allows one to pose the question of its relation to the concrete: what is the connection relating

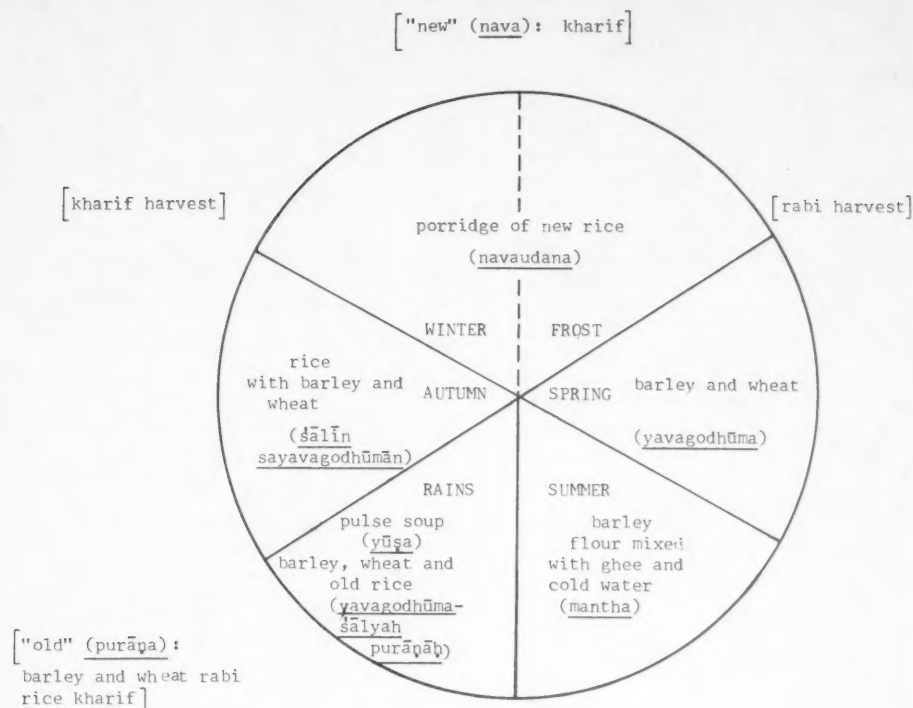


Fig. 3. Cycle of cereal consumption.

what the texts say to what one can observe in India today? To give just one example, we have tried in Fig. 3 above to illustrate what Caraka says [23] concerning the cycle of consumption of cereals in the form of soup or porridge. A rather fine-grained example, one might say? Still, it falls into a pattern that will not surprise us. A first pair of contrasting elements opposes the wintry regime to the regime of summer: porridge (*odana*) vs cold drink (*mantha*),\* the compact and nourishing porridge during the (more fluid) winter season, vs the light and refreshing beverage during the (drier) summer. A second more elliptical contrast makes reference, it seems, to the cycle of agricultural production (spring-summer harvest vs autumn-winter harvest): old vs new (grains); in the rainy season, "old wheat, barley and rice" (*yavagodhūmaśālyah purāṇāḥ*), probably drier (barley and wheat having been harvested in the spring, rice in the winter), vs the winter's "porridge of new rice" (*navaudana*), which is probably more nourishing (being from the winter harvest) [24].

So we will not be surprised to find that the principle of appropriateness is explicitly defined as a compensation of contraries and as a habituation:

*ityuktam rtusātmyam yac cestāhāravyapāśrayam/  
upaśete yadaucityād okaḥsātmyam tad ucyate/  
deśānām āmayānām ca viparitagunam guṇaiḥ/  
sātmyam icchanti sātmyajñāś cestitam cādyaṃ eva ca//*  
"Here is laid out what is appropriate to the season, in the domain of bodily practices and foods. We call *okaḥsātmya* (acclimatation, "acquired appropriateness") that which

is beneficial to one after a process of getting used to it. To the qualities (*guṇaiḥ*) of places and sicknesses, experts in appropriateness (*sātmya-jñā*) strive to fit an alimentary and physical regimen (*sātmya*) of contrary qualities (*viparitaguna*)" [25].

Here again Cakrapāṇidatta's commentary is invaluable. It allows us to interpret the instrumental *guṇaiḥ* by restoring the absent but understood postposition: *guṇaiḥ saha*, "simultaneously with the qualities" of the place where he lives, of the disease he suffers from, the patient must get used to the contrary qualities, so as to compensate for the excesses and insufficiencies at the root of his ailment. If a place is swampy, its excessively unctuous and heavy qualities (*snehagauravādi*) producing troubles of the phlegm (elephantiasis, etc.) then the indicated foods are meats from dry lands and honey (*jāṅgalamāmsamadhvādi*), foods whose harsh and light qualities (*rauḥṣyalāghavayuktam*) compensate for the excesses of the climate [26]. In principle, the opposed pairs thus constituted find a place in the scheme of appropriate observances for the various seasons: we may cite, for example, the opposition between swampy, heavy, nourishing meats, to be eaten in winter, and the light astringent meats of the dry lands which are eaten in the hot or the rainy season. In this way the seasonal cycle furnishes the physician with a framework within which he may manipulate a dialectic of contrasts; it offers him a typology of all possible compensations. This is the idea expressed in the second of the two verses cited above. At this level, reference to the articulations of time is absent: the cycle defines a closed series of climates, the cycle is a circle, a form, a system. "Appropriateness" here means *compensation*.

\* *Mantha* is a mixture of flour with cold water and ghee.



But time must be reintroduced. Therapeutic action is slow, progressive, subject to the laws of time. Remedies, precisely because they are *contrary* to what predominates in the sick person, are at first dangerous: their efficacy and their innocuousness result from getting used to them gradually, as Caraka remarks elsewhere: *sātmyam nāma tad yat sātatyenopasevyamānam upaśete*; "What is called 'appropriate' is what is beneficial after a sustained course of consuming it" [27]. This is the sense of the first of the two verses cited above. *Rtu-sātmya*, appropriateness to the articulations of time, brings in its wake *okaḥ-sātmya*, appropriateness by habituation [28]. The cycle of the seasons is an education, a methodical development of habits, from which there results (as we would be tempted to say, considering the meaning of *okas* as "house, residence") a well-regulated idiosyncrasy, consisting of reactions well-attuned to the stimuli of the external milieu.

Is it not this singular appropriateness of each living being to such and such a climate or symbolic landscape that the Indian poets suggest (in the *śrīṅāra*, erotic, mode) by the metaphor of drunkenness? Thus the elephant in the rainy season becomes drunk with the new water and the rumbling of the storms because he finds himself, at last, once more in the time appropriate to his nature.

## REFERENCES

1. Renou L. Un thème littéraire en sanskrit: les saisons. In *Sanskrit et Culture*, pp. 145-154. Payot, Paris, 1950. Also Védique *rtu-*. *Archiv Orientalni* 18 431, 1950.
2. Silburn L. *Instant et Cause*, p. 36. Vrin, Paris, 1955.
3. Suśruta.\* *Sūtrasthāna*, Chap. 6, beginning.
4. *Ibid.*, Chap. 35, para. 39.
5. Dalhana, in Suśruta. *Op. cit.* Chap. 35, para. 39.
6. Caraka.† *Vimānasthāna*, Chap. 1, para. 22 (6).
7. *Ibid.* Chap. 8, para. 125.
8. Suśruta. *Cikitsāsthāna*, Chap. 33, par. 3.
9. Caraka. *Sūtrasthāna*, Chap. 11, paras 42-44.
10. Caraka. *Vimāna*., Chap. 8, para. 76 (with Cakrapāṇidatta's commentary).
11. Caraka. *Sūtra*., Chap. 6, beginning (cf. [25] below).
12. A classic formula; cf. for example *Raghuvamśa*, I, 18.
13. As Suśruta confirms, *Sūtra*., Chap. 6, para. 7, in opposing the two series *amla-lavaṇa-madhura* and *tikta-kaṣāya-kaṭuka*.

14. The six seasons thus defined are combined in a fairly complicated way with the "five landscapes" (*aintinai*) in classical Tamil poetry. Cf. Zvelebil K. *The Smile of Murugan*, p. 95. Brill, Leiden, 1973. There are interesting points of divergence here. The vernacular literatures of North India make use of another form of the cycle, that of the "twelve months"; cf. Vaudeville C. *Bārahmāsā*. Pondichéry, Institut Français, 1965.
15. In the first fascicles of a translation of the *Suśruta-saṃhitā* published in the *Bibliotheca Indica* in 1897. While extremely valuable, this work was never completed.
16. Vāgbhaṭa.‡ *Aṣṭāṅgahṛdayasaṃhitā*, *Sūtra*., Chap. 13, vv. 58-59.
17. Vāgbhaṭa. *Sūtra*., Chap. 13, v. 35.
18. Vāgbhaṭa. *Sūtra*., Chap. 13, v. 36 (with the commentary of Aruṇadatta).
19. Caraka. *Sūtra*., Chap. 6, vv. 17, 26 and 32.
20. *Ibid.* vv. 17, 25 and 31.
21. Caraka. *Sūtra*., Chap. 27, para. 203 ff.
22. Caraka. *Cikitsā*., Chap. 3, para. 41 ff.
23. Caraka. *Sūtra*., Chap. 6, vv. 13, 25, 28, 38 and 43.
24. Barley and wheat, sown after the rains, are harvested in the spring. This is the *rabi* harvest. *Śāli* rice, sown after the beginning of the rains, is harvested in the period November-January: the *kharif* harvest. "*Śāli* is a winter grain," says Cakrapāṇidatta (in Caraka. *Sūtra*., Chap. 27, para. 8). It is thus new in winter, and old during the rains: this detail opposes *śāli* rice to other varieties (such as *śaṣṭika* rice) harvested in the summer.
25. Caraka. *Sūtra*., Chap. 6, vv. 49-50 (the first words repeat the beginning of the chapter).
26. Cakrapāṇidatta in Caraka. *Op. cit.* (*Sūtra*., Chap. 6, para. 50).
27. Caraka. *Vimāna*., Chap. 8, para. 118.
28. *Okas* or *oka*: what is pleasing, whence the place that is pleasing, home, the house. Cakrapāṇidatta gives it the sense of "habit" (*okasātmyam abhyāsasātmyam*. In Caraka. *Sūtra*., Chap. 24, para. 3).

## BIBLIOGRAPHY

\*Suśruta (with the commentary of Dalhana), †Caraka (with the commentary of Cakrapāṇidatta), and ‡Vāgbhaṭa (with the commentary of Aruṇadatta) are cited following the editions published by Nirṇaya Sagar, Bombay.  
Hoernle A.F.R. *Suśrutasaṃhitā*. Translation, fasc. 1, Calcutta, (Bibliotheca Indica) 1897.  
Raghavan V. *Rtu in Sanskrit Literature*. Shri Lal Bahadur Shastri Kendriya Sanskrit Vidyapeetha, Delhi, 1972.  
Vogel C. Die Jahreszeiten im Spiegel der altindischen Literatur. *Z. D. morgenländ. Ges.* 121, 284, 1972.

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## THE MANIA FOR SONS: AN ANALYSIS OF SOCIAL VALUES IN SOUTH ASIA

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**Abstract**—This paper describes a long tradition that values the birth of sons and devalues daughters in South Asia. The ultimate expression of this tradition was the widespread practice of female infanticide. We give data from the records of three hospitals in a large city in India that show the use of modern medical science to determine the sex of foetuses, and the selective abortion of female foetuses. We assert that this practice continues earlier practices of female infanticide, and expresses a mania for sons that afflicts the whole society.

Infanticide was a custom at one time or another in all of the civilizations of antiquity, and the traditions and structures of these societies always put the greatest burden of infanticide on females. Our aim in this paper is to point out that female infanticide continues in practice to the present day, supported by traditional values in South Asia. Modern science and technology provide ways to find the sex of the unborn child, and this medical feat is used in India to discover female children so that they can be eliminated.

The data we present was collected from the records of the genetic section of the pediatric departments of two hospitals, and from the Family Welfare Association in a city of Western India. We examined the records for one year of patients who consulted these institutions to determine the sex of foetuses, and for sterilization. In this paper we present data on the termination of pregnancy after determining the sex of the child, and relate these terminations whether the foetus was male or female, and to the number and sex of existing children born to the woman.

We have not yet studied the data by caste, class, religion, or the age and education of the parents, but limit our interpretation to describing the pattern expressed in Hindu ritual and lore that favours sons and disparages the birth of daughters. While we emphasize the Hindu version of the mania for sons in South Asia, we believe that in this respect the Sikh, Muslim, Buddhist and other communities share this civilizational pattern.

Marriage in the Hindu fold of life is traditionally considered essential for procreation and the continuation of the family line. The birth of a son is greatly desired, and the godly blessings for the expectant mother are that she will give birth to a male child. Even the blessing showered on the bride at the marriage ceremony is "May you be blessed with eight sons" (*Ashta putra sowbhagyavati bhavet*). A short time after marriage, the ceremony called *Garbhadhana* is performed by the husband. It consists of an offering and a prayer to the Sun by the husband and wife for the conception of a son. The last line of this prayer by the husband is, "Oh faithful wife, give birth to a son who will live long and perpetuate our line" (*Dirghayusam vamasadharam putram janaya subrate*). Three months after conception the *Pumsavana* ceremony for obtaining a son is performed [1]. In the *Atharva Veda*,

one of the four most sacred texts of Hinduism, *mantras* are prescribed for chanting so that if by chance the foetus is a female it will be transformed to a male. Other texts mention that if a female child is born it is an *arista*, or ill-omen.

The fourfold system of the Purusharthas, which outline an ideal life cycle, are directed toward the goal of attaining *moksha*. This form of salvation or perfection could be finally achieved through sons, who would offer ancestor worship. Dr Radhakrishnan wrote that Hinduism is a way of life rather than a form of thought, for it is primarily concerned with codes of practice rather than with beliefs. *Dharma*, or right action, regulates the most intimate details of daily life, and *moksha* is the ultimate satisfaction toward which masculine activities should be directed. Women are not suited to formal religious training and knowledge, however, so that they are not encouraged to seek *moksha*. They are expected to lead a life of dutiful subjugation so that they may be reborn a man in another life, and thus be gifted with religious privilege.

The traditional joint family was patriarchal, patrilineal and patrilocal. It guarded the social position, religious commitments, economic assets and the traditional values dear to the Hindus. The authority of the head of the household passed on from father to son. In the family women were primarily respected as the mothers of sons, and the Hindu pantheon has a number of goddesses who are worshipped in this capacity. K. M. Kapadia described the family position of female children as follows:

A female child does not usually receive the same attention and affection that is bestowed upon a male child in a Hindu family, and this attitude tends to intensify into indifference and coldness towards her. While some castes practicing hypergamy have stopped at the intentional neglect of a female child, others have gone to the extent of practicing female infanticide. Infanticide is generally known to have been a practice with the Rajputs and there is little doubt that other castes like the Anavils and the Kulins resorted to it under the stress of economic pressure [2].

The anthropologist, T. N. Madan, wrote that among Kashmiri Pandits "sons are particularly auspicious and therefore greatly desired... a daughter's birth makes even a philosophic man (who has renounced

Table 1. Type of patients using Genetic Services at Hospital (A) during twelve months of 1976-77\*

Types of people who consulted the unit	Nos	Actual nos %	Type of people who consulted
Already had one or more mentally retarded children	240	60	All religions: 30% Hindus, 5% Nava Buddhas, 5% Sikhs, 7% Parsis, 10% Muslims and 3% scheduled castes and others
Requested tests to detect chromosome abnormalities	40	10	All religions: 5% Hindus, 3% Muslims, 1% Parsis, 1% others
Requested tests to find out if the child has haemophylic anaemia	20	5	1% Parsis, 3% Bohris, and 1% Nav Buddhas
Consulted for miscellaneous disorders	8	2	—
Wanted to find the sex of the child	92	23	21% Hindus & 2% Muslims
Total	400		

\* Individual records are kept meticulously by the hospital on medical case sheets. The departments were new units of the hospital. The data was compiled by the authors from the hospital records.

the world) gloomy, whereas a son's birth is like sunrise in the abode of gods" [3]. Economically, a female child is considered a drain on the family purse. She takes away considerable money in the form of wedding expenses and a dowry. As she grows up a girl is trained in the parental home to take up the role of a housewife, but when she takes the role she has been groomed for she becomes an asset in the house of the in-laws. The burden of rearing the girl falls on the parents, but there is no material gain from this endeavor. A male offspring is a better investment since he is the potential breadwinner for the parents in years to come.

The reform movements of the 19th and 20th centuries have caused very little change in the social concept of begetting a son or a daughter. Even the legal emancipation of women in independent India, and the large scale education and employment of women in modern occupations have not greatly modified the

traditional psychology regarding female children. In our view, the obsession for a son is a structural and cultural affliction of Indian society. The data which follow will show how this obsession distorts the use of modern science and technology.

The possibility of diagnosing genetic defects initiated research on antenatal sex determination. Over 25 tests are now available to determine various genetic disorders. The risk involved in removal of amniotic fluid is minimal, with chances of abortion less than 5%, in addition to other risks associated with amniocentesis. Antenatal sex determination is useful in some cases of sex-linked genetic disorders. Three basic tests are used on amniotic fluid to determine sex of the baby, and in approximately 90% of the cases the results are correct. It is easier to obtain amniotic fluid in later weeks of pregnancy, but the usual time this fluid is withdrawn is after 15-16 weeks of pregnancy. This allows ample time to evacuate the

Table 2\*. Number of cases who sought anti-natal determination of the sex of foetuses at Hospital (B)\* between June 1976 and June 1977 (sex detection)†

Month	No. of cases	Prediction of		MTP‡ of foetus (female)	Retention	
		male foetus	female foetus		male	female
June 1976	57	20	37	37	20 + 0	
July 1976	60	22	38	38	22 + 0	
August 1976	58	19	39	36	19 + 3	
Sept. 1976	64	25	39	35	25 + 4	
Oct. 1976	60	22	38	38	22 + 0	
Nov. 1976	62	27	35	32	27 + 3	
Dec. 1976	54	23	31	30	23 + 1	
Jan. 1977	60	16	44	40	16 + 4	
Feb. 1977	52	22	30	29	22 + 1	
March 1977	63	18	45	44	18 + 1	
April 1977	60	16	44	43	16 + 1	
May 1977	50	20	30	30	20 + 0	
Total	700	250	450	430	250 + 20	

\* The data for this table was compiled from the hospital by the authors in 1978. Hospital (B) is a large one in which records are filed by the doctors themselves and are accurately kept.

† All of the cases are women and all of the tests involved the withdrawal of amniotic fluid.

‡ MTP: Medical Termination of Pregnancy.

Table 3. Table showing the pattern of children that the respondents had before sterilization (Hospital C)\*

Sex of the child		No. of couples	Sex of the child		No. of couples	Sex of the child		No. of couples	Sex of the child		No. of couples	Equal distribution		No. of couples
male	female		male	female		male	female		male	female		male	female	
0 + 1		3	1 + 0		1	2 + 1		107	1 + 2		40	0 + 0		1
0 + 2		4	2 + 0		26	3 + 1		51	1 + 3		18	1 + 1		30
0 + 3		3	3 + 0		37	4 + 1		7	1 + 4		10	2 + 2		77
0 + 4		2	4 + 0		13	5 + 1		1	1 + 5		4	3 + 3		9
0 + 5		1	5 + 0		3	3 + 2		27	1 + 6		1	4 + 4		1
						4 + 2		4	1 + 7		1			
						4 + 3		4	2 + 3		21			
						5 + 2		2	2 + 4		11			
						5 + 3		2	2 + 5		5			
						6 + 2		1	3 + 4		6			
						7 + 2		1	3 + 6		1			
									4 + 5		1			
Total		13			80			207			119			118

\* The data for this table was compiled from the Family Welfare Hospital by the authors in 1978. Records are filed and accurately kept by the doctors themselves.

uterus in case some abnormality is detected. The time required to get the results of the tests is 3 days.

Table 1 shows that 400 individuals used the genetic service at one of the hospitals (A) that we studied for a 12 month period in 1976-77. About 80% of these patients were referred to the service by physicians. The 20% who came on their own initiative were well-educated people who had heard about the service. The 8 people who consulted the service for "miscellaneous disorders" included a young couple who sought marriage counselling because they were first cousins, and people who were having convulsions, who had mentally retarded parents, or who had some endocrinal disorder. The 92 women who consulted the service to find out if their expectant child was male or female all wanted to evacuate the foetus if it was female, and they wanted to retain the foetus if it was a male child, even when there was a chance of genetic defect.

All of the religious groups in the city and surrounding countryside were represented among the patients

of the service, but a majority of those who wanted to find out if they had haemolytic anaemia were Bohri Muslims, Parsis or Nava Buddhas. These groups have a high incidence of this disorder.

Table 2 reveals that of the 700 women who determined the sex of the foetus at Hospital (B) during a 12 month period, 450 were informed that they would have a daughter, and 430 of these women (95.5%) had the foetus evacuated. The biologically unusual percentage of female foetuses cannot be accounted for, except to note that those who already have children do not come in greater numbers, except in very exceptional cases. All of the 250 cases in which male children were predicted were carried to full term, even when the parents were advised that there was a chance of genetic disorder in the child.

Hospital (B) staff members estimated that the people who came to the centre were approximately 20% of the upper classes, 70% from the middle classes, and 10% from lower classes. This low representation from the lower classes may be because they are not

Table 4. Age of the respondents and numbers of operations performed between 1976 and 1977 by the Family Planning Hospital in Maharashtra, India\*

Age	Respondents		No. of operations performed	
	female	male	Tubectomy	Vasectomy
21-25	62	9	49	1
26-30	143	68	125	6
31-35	127	125	109	19
36-40	96	131	84	28
41-45	35	79	24	13
46-50	22	39	19	7
51+	8	32	8	4
No response	44	54	35	6
Total	537	537	453	84

\* The data for this table was compiled from the Family Welfare Association by the authors in 1978. Records are filed and accurately kept by the doctors themselves.



aware of the facility, or not able to spend time on repeated hospital visits. Nevertheless, illiterate people as well as those with considerable education sought help from this center. The average age of the mothers who came to the center was between 25-35 years.

Tables 3 and 4 contain data collected from a Family Welfare Hospital. They show the pattern of children that couples had when they went for sterilization. On the whole, people who have male children in greater numbers do not mind using this method of birth control. Only 13 cases (2.5%) were couples who consented to a tubectomy or vasectomy even though they did not have a son. In these cases, the main reason was a difficult first delivery and grave danger to the mother's life in case of another pregnancy. On the other hand, 80 couples (approx 15%) underwent sterilization in spite of not having a female child, even though there were no physical disabilities in having another child.

Table 4 shows the age of the male and female respondents when they were sterilized. More females undergo this operation, even though the operation of the male is easier and consumes less time. It is also safer. The reasons for this are said to be (1) male fear of the loss of virility, (2) in case the wife dies, on a second marriage the male should be able to produce again (whereas widow remarriage is not considered), and (3) in case the living sons die, some more may be conceived.

## CONCLUSION

The pattern we have documented of inducing abortion when the foetus is female continues the traditional practice of female infanticide. We are aware that abortion is not defined as infanticide by most enlightened people in the world today. Legally it is not infanticide in India or in most other modern societies. Yet the mania for sons is part of a traditional pattern that continues to denigrate and exploit women in South Asia, and that makes female foeticide a thinly disguised continuation of long practiced infanticide.

## REFERENCES

1. Antoine R. The Hindu Samskaras in Delenry. In *Religious Hinduism: A Presentation and Appraisal* (Edited by Newner G. and Newner J.). St. Paul Publications 1964; See also, Altekar A. S. *The Position of Women in Hindu Civilization*. The Culture Publication House, BHU, 1938; Bullough Vern L. *The Subordinate Sex*. Penguin Books, New York, 1974; Thomas P. *Indian Women Through the Ages*. Asia Publishing House, New York, 1964.
2. Kapadia K. M. *Marriage and Family in India* (3rd edn). Oxford Univ. Press, Calcutta, 1966.
3. Madan T. N. *Family and Kinship*. Asia Publishing House, Bombay, 1965.

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## CLIENT CHOICES AMONG OSTEOPATHS AND ORDINARY PHYSICIANS IN A MICHIGAN COMMUNITY [1]

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**Abstract**—The U.S.A. has a "plural medical system" in which the most successful unorthodox subculture is osteopathy; however, it is perhaps also the least different from orthodox medicine. Yet the differences are significant. This study shows how client perceptions of osteopathic physicians (D.O.s) and ordinary physicians (M.D.s) influence the utilization of health care services; thus it deals with interrelationships between characteristics of clients and of practitioners. The study of a small Michigan town where clients have approximately equal access to the two kinds of physicians is based on interviews with a random sample of residents. A substantial fraction of the clients say that they do not perceive any difference between D.O.s and M.D.s. Among those who do perceive a difference, M.D.s tend to be rated in the abstract more highly than D.O.s. Nevertheless, more clients utilize D.O.s than M.D.s, and relationships with D.O.s are longer in duration. Most clients recognize the widespread belief in exclusive legitimacy of M.D.s, even if it does not convince them. Yet despite the ideological dominance of M.D.s, clients pragmatically favor consultation with D.O.s.

### INTRODUCTION

The widespread characterization of cosmopolitan medicine as "scientific" is at best problematic [2]. It is also misleading to label all other forms of practice "folk medicine", or "non-Western", or "quackery". Even chiropractic, which originated in Iowa, has been called "non-Western" by one anthropologist [3]. Clearly, some kinds of practice do not fit the scheme in which a monolithic orthodoxy is contrasted to a stigmatized remainder. Perhaps because *osteopathy* contradicts the monolithic concept of "scientific medicine", it has been largely ignored by sociologists and anthropologists. The genesis and survival of osteopathy as a subculture is an interesting problem, and the existence of osteopathy in many localities in the U.S. as an alternative practice requires revision of the usual models of health care service utilization.

The concept of plural medical systems has been applied to Asian countries [4], but it is appropriate also for the U.S.A. One rationale for discounting pluralism in the U.S.A. has been that once prominent subcultures have merged with the mainstream, as is often said of homeopathy; another rationale is that other subcultures are severely "limited" systems, as is often said of chiropractic. Both of these rationales have been used to excuse the scholarly neglect of osteopathy: claiming until recently that it was so *unlike* orthodox medicine that it was of little importance, but recently claiming that it has become so *like* orthodox medicine that it need not be considered separately. Although difficulties exist in locating the boundaries of osteopathy as a subculture, models of health service utilization should include, in addition to self-care and "the doctor", also different *kinds* of doctors—not only general practitioners, specialists, and subspecialists, but M.D.s and D.O.s ("osteopathic physicians" or "osteopaths"). And the list can be extended to less successful competitors such as chiropractors and naturopaths, to Christian Science practitioners, and to chiropodists and podiatrists, and so on.

Partly because the standard model considers only a restricted range of orthodox practitioners, explanations of utilization are based largely upon differential characteristics of medical clients. Less attention is given to the differential characteristics of *practitioners*. Client characteristics such as age, sex, socio-economic status, ethnicity, personality, and diagnosis, along with lay referral networks and geographical availability, have received substantial attention as independent variables affecting utilization of services. Practitioner characteristics have been largely neglected, including not only age, sex, ethnicity and personality, but also kind of practitioner. Client characteristics are usually observed from the *physicians'* perspective, but service utilization is largely a product of client perceptions of practitioner characteristics. Client perceptions of practitioners are the result of interrelationships between characteristics of clients and characteristics of practitioners.

An additional element that is usually ignored in research on the American system is the simultaneous utilization of various services by clients and the practice of switching serially from one form of practice to another.

### SOURCES OF DATA

In order to investigate how clients perceive the differences among practitioners in the U.S.A.'s plural medical system and choose among them, a study was made of a Michigan community where the medical subculture of osteopathy is represented as well as the orthodox medical subculture of M.D.s. 17% of the active physicians in Michigan are D.O.s, the largest fraction of any state. Other states in which more than 10% of the physicians are D.O.s are Maine, Missouri and Oklahoma. The national average is about 4% [5]. However, in some rural areas D.O.s outnumber M.D.s.

A study community was defined as the area of a certain rural telephone exchange in central Michigan,

Table 1. Community survey sample

	Households		Number of individuals	Incidents
Households sampled (random)	40 sampled		(ca 80)	—
Households interviewed/	3	at 1	3	
Eligible members	22	at 2	44	
	3	at 3	9	
	1	at 5	5	—
	29 (72%)		61	
Households interviewed/	12	at 1	12	
Individuals interviewed	16	at 2	32	> 63
	1	at 5	5	
	29		49 (80%)	
Incidents tabulated			36	at 1
(and source)			12	at 2
			1	at 3
	29		49	63

which includes a county seat town with a population of about 3000 and a rural hinterland with an approximately equal population. This definition corresponds to a community centered on a town in which approximately equal numbers of D.O.s and M.D.s are located, all of whom are general practitioners [6]. These practitioners have nearly equal access to two hospitals. One is a privately owned osteopathic hospital, which recently employed an M.D. staff member for the first time, a pathologist. This hospital is about 18 miles from the study town. The other hospital is publically owned. Formerly it excluded D.O.s, but now has several on its staff. It is about 12 miles from the study town. A chiropractor also lives and works in the study town.

I made ethnographic observations in the community and two surveys, one of community residents and one of physicians. The community survey was composed of intensive interviews with members of households randomly drawn from the telephone directory. (Extensive inquiries failed to discover any household in this community that did not have a telephone.) From January to November of 1977, 40 households were contacted and interviews were conducted with at least one member of 29 of these households (72%—Table 1). An attempt was made to interview all members of these households aged 18 and above. Of 61 eligible members, 49 were interviewed (80%). Most interviews lasted about 1 hour with a range from 20 minutes to 3 hours. Most of the interviews took place in the respondents' homes. In many cases, I was alone with the respondent; in many cases other household members were present, sometimes "kibitzing".

Information from practitioners was obtained from a complete survey of the physicians practicing in the study town. Using a form similar to the one used in the National Ambulatory Medical Care Survey [7], physicians were asked to report data on all the patients served on Wednesday, September 27, 1978. The three D.O.s, two M.D.s, and one chiropractor served 208 patients including reported telephone consultations on this day (Table 2) [8].

#### DESCRIPTION OF PHYSICIANS PRACTICING IN THE STUDY COMMUNITY

Although there is no longer much disagreement over designating D.O.s as "physicians", the inclusion of chiropractors (D.C.s) may be somewhat controversial. The chiropractor in the study community ("DC3") is one of the significant minority of U.S.A. chiropractors who call themselves "chiropractic physicians" and who aspire to the status of *unlimited* practitioners now shared by D.O.s and M.D.s. However, legally chiropractors' practice is severely limited in most states, including Michigan. DC3 has acquired, since graduation from a chiropractic college, some formal training in many of the diagnostic and therapeutic procedures used by the D.O.s and M.D.s, and he would like to have the right to use them. Most of his clients perceive and utilize him as a specialist in manipulation, and consult an M.D. for other purposes. In this community, I found no cases in which a person utilized a D.O. simultaneously with either M.D.s or chiropractors [9].

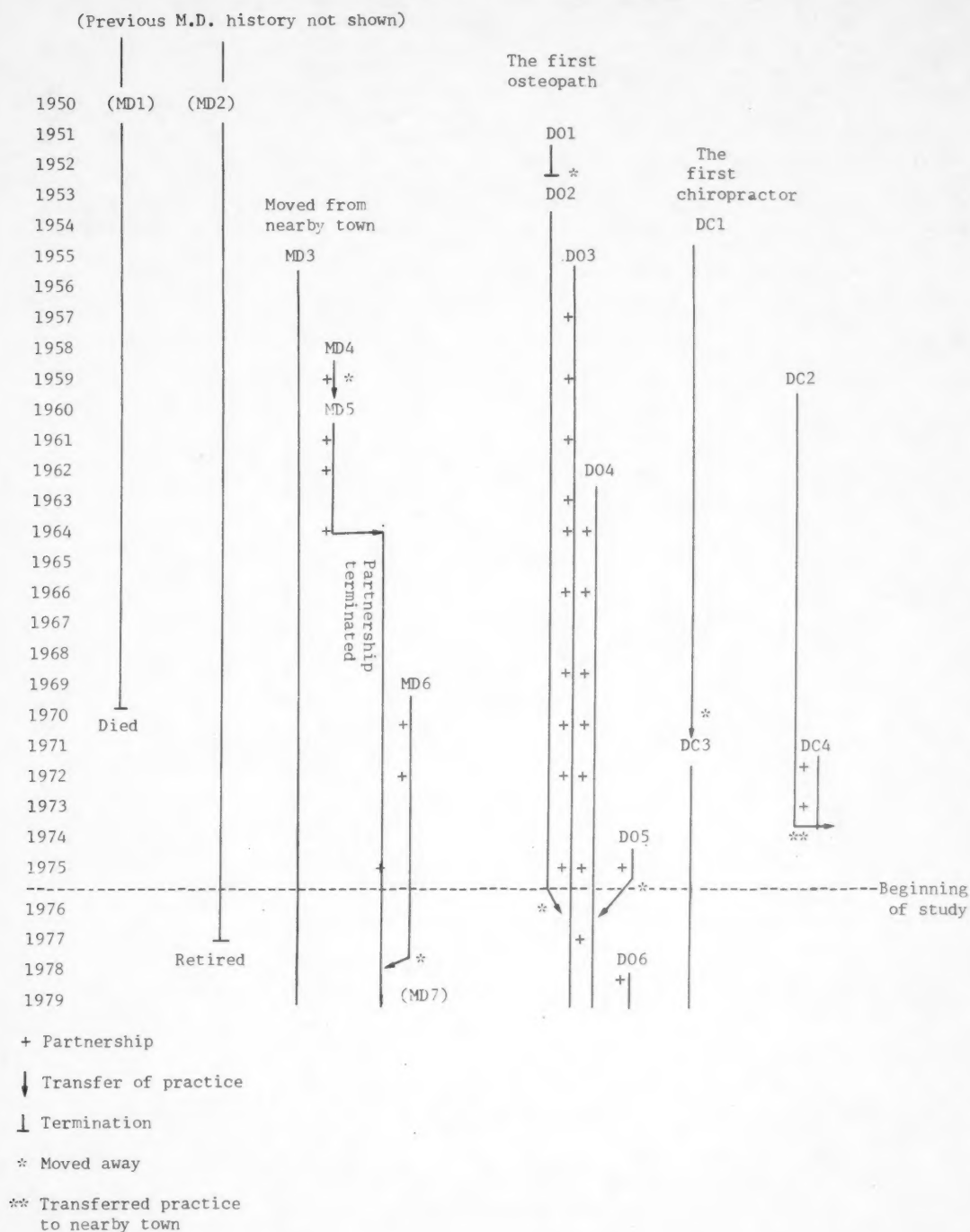
When it was selected for study in 1976, the study community had had rather stable and equal numbers of D.O.s and M.D.s for several years. However,

Table 2. Patients served on the sample day, reported by physicians

Patients served	
MD3*	50
MD5*	48
DO3	21
DO4	41
DO6	30
DC3	18
Total	208

\* On the date sampled, both M.D.s had office hours scheduled in the evening, as well as during the daytime.

Table 3. History of physicians in the study community since 1950



shortly after the study began, a period of relative instability ensued, and has continued to the present (Table 3). But the balance between D.O.s and M.D.s has remained about even, during a change from 4 D.O.s and 4 M.D.s in early 1976, to 3 D.O.s (only 2 of the same) and 2 M.D.s in 1978—with another M.D. expected to arrive in mid-1979.

The M.D.s in the community (since the retirement of MD2 in 1977) and the chiropractor are members of the Seventh-Day Adventist religious denomination. The Seventh-Day Adventist "health message", as it is called, encourages general practice and what might well be characterized as a "holistic" approach [10]. General practice and holism are said to characterize



osteopathy [11]. Consequently, the comparison of D.O.s and M.D.s in this community constitutes a severe test of the hypothesis that there are important differences between the two kinds of physicians.

MD3 has been a solo practitioner, following the break-up of his partnership with MD5. MD5 in turn has been a partner with MD6, and expects MD7, another Seventh-Day Adventist, to join him in May, 1979. Previous M.D.s in the community all had been solo practitioners. In contrast, all D.O.s are members of the "Town Clinic", and thus do not compete among themselves in the same way that the M.D.s do. People invariably described themselves in interviews as patients of a particular M.D., but those who consulted a D.O. often described themselves as patients of the "the Clinic" and often referred to it as "our clinic". In one sense, this difference in practice organization confounds the comparison of D.O.s and M.D.s. However, because the same contrasting pat-

terns of D.O. and M.D. organization were repeated regularly in surrounding towns, this type of "clinic" (named after the town) can be interpreted as a distinctive trait of the local D.O. subculture, which differentiates it from the M.D. subculture.

The physicians survey data confirm that the M.D.s use virtually no physiotherapy [12], even though they are Seventh-Day Adventists, and that the chiropractor uses physiotherapy for 82% of his patient encounters (Table 4). Since the use of "osteopathic manipulative therapy" is one of the main characteristics today distinguishing D.O.s from M.D.s, the extent to which manipulation is used by D.O.s is an important variable. Many D.O.s in the U.S. do not use manipulation at all; one recent study estimated that 39% of D.O. general practitioners do not use it [13]. The 3 community D.O.s use manipulation in 10% of patient encounters (Table 4). The cumulative fraction of patients who receive manipulation at one

Table 4. Therapies provided by physicians in study community (number of patient encounters, in office)

Two M.D.s		Medications		
		None	Some	Total
Manipulation	None	22 (22%)	76 (78%)	98 (100%)
	Some	0	0	0
	Total	22 (22%)	76 (78%)	98 (100%)
Three D.O.s		Medications		
		None	Some	Total
Manipulation	None	35 (42%)	40 (48%)	75 (90%)
	Some	3 (4%)	5 (6%)	8 (10%)
	Total	38 (46%)	45 (54%)	83 (100%)
One D.C.		Medications		
		None	Some	Total
Manipulation	None	0	3 (18%)	3 (18%)
	Some	10 (59%)	4 (23%)	14 (82%)
	Total	10 (59%)	7 (41%)	17 (100%)

Differences between these distributions were tested using  $\chi^2$  corrected for continuity. For M.D. vs D.O.,  $\chi^2 = 33.7$  with one d.f.; significance is less than 0.001. For D.O. vs D.C.,  $\chi^2 = 87.1$  with one d.f.; significance is less than 0.001.

The differences of distributions of D.O.s vs M.D.s and of D.O.s vs the D.C. were compared using the actual distribution for D.O.s to calculate expected distribution for M.D.s and for the D.C.:

D.O. vs M.D. observed	(M.D.)	22	76	0	0
expected		41	47	4	6
D.O. vs D.C. observed	(D.C.)	0	3	10	4
expected		7	8	1	1

Table 5. Clients perceptions of differences between M.D.s and osteopaths

M.D.s authentic physicians	5 (10%)	5 (10%)
M.D.s more inclusive in services	3 (6%)	
M.D.s more education	8 (16%)	13 (26%)
M.D.s more "specialized"	2 (4%)	
M.D.s and osteopaths same	16 (33%)	18 (37%)
Don't know of any difference	2 (4%)	
Osteopaths more inclusive in services	10 (21%)	10 (21%)
Osteopaths authentic physicians	1 (2%)	1 (2%)
Don't know	1 (2%)	2 (4%)
No data	1 (2%)	
Total	49 (100%)	49 (100%)

time or another would be considerably higher than 10% [14].

#### CLIENT PERCEPTIONS OF PHYSICIANS

The survey of physicians shows their perceptions of themselves, but *clients* may have other views. Client perceptions influence practitioners by rewarding or punishing different behaviors [15]. Client perceptions and utilization of services thus affect the development of the professional subcultures. Because "osteopath", rather than "D.O.", is the term used by clients, "osteopaths" will be used in this section when referring to clients' perceptions.

Although the differences between osteopaths on the one hand and M.D.s on the other are very important to some clients, other clients are not aware of any differences. Indeed, D.O.s and M.D.s disagree among themselves about whether they differ in important ways. Since there may or may not be "objective" differences, and clients may or may not perceive differences, there are four possibilities. A "*frank*" difference would be an objective difference which is also perceived. An objective difference *not* perceived by clients would be a "*silent*" difference. If clients perceive a difference that cannot otherwise be demonstrated objectively, there would be a "*putative*" difference (that nonetheless could be culturally important, and of practical significance to health care). *No difference* is the fourth possibility. Any difference, "frank", "putative", or "silent", could affect client choices.

When clients were asked to "describe the differences between M.D.s and osteopaths"—a strong technique to elicit those perceptions that can be verbalized—37% answered either that the two are the same or that they did not know of any difference (Table 5). 59% gave answers that can be summarized as statements that one or the other was more authentic or more inclusive, or that M.D.s were more highly educated, or more likely to be specialists. Answers favorable to M.D.s were given by 36% of respondents, and answers favorable to osteopaths by 23%.

Clients were asked to compare M.D.s and osteopaths in two questions: "In general, which would you say is better?; which can help people more?" and then,

"With regard to your own personal health needs, which have you gotten more help from?" (Response to the "more help" question depends upon past utilization, as well as upon evaluations.) With regard to which is "better in general" 43% of respondents were neutral, 37% favored M.D.s, and 20% favored osteopaths (Table 6). However, to the question about which had been "more help", neutral answers were given by 24%, and M.D.s and osteopaths were rated about equally at 37% and 39% (Table 6). Thus, as one moved from the hypothetical questions about perceptions and attitudes to the pragmatic question of utilization, the bias in favor of M.D.s was replaced by an equal rating.

A comparison of perceptions of differences (Table 5) with relative ratings (Table 6) showed that they are closely related, but that inconsistent answers are in the direction of rating and, even more, of utilizing osteopaths at higher levels than would be predicted from the reported perception of differences.

#### UTILIZATION OF PHYSICIANS

78% of clients interviewed reported that their "regular physician" practiced in the study town (Table 7). 57% of clients utilized D.O.s, compared to 43% M.D.s (Table 7). Those whose regular physicians practiced in adjacent towns were almost evenly split between D.O.s and M.D.s; the preponderant use of D.O.s is by clients with a regular physician in the study town.

These data are based upon my objective classification of the physicians which clients reported utilizing as D.O.s or M.D.s. Client perceptions did not always coincide (Table 8): 66% of the M.D. clients identified their regular physicians as "M.D.s", but 24% did not, even after persistent nondirective probing. Some clients identified their M.D.s as "medical—not osteopath", some as "regular doctor", "plain doctor" or "G.P." and some just "don't know". 77% of the D.O. clients identified their regular physician as "osteopath" or, in a few cases, "D.O.", while 15% said he was as "regular doctor", "plain doctor", or "G.P." One identified a D.O. as an "M.D.", and one "didn't know".

Table 6. Clients' comparisons of M.D.s and osteopaths

<i>Better in general</i>	<i>More help to me</i>			Total
	M.D.s	Same	D.O.s	
D.O.s no good	1	0	0	1 (2%)
M.D.s decidedly better*	5	2	0	7 (15%)
M.D.s probably better	8	1	0	9 (20%)
Equal/no opinion	3	6	11	20 (43%)
D.O.s probably better	0	1	4	5 (11%)
D.O.s definitely better	0	1	3	4 (9%)
M.D.s no good*	0	0	0	0
Total	17 (37%)	11 (24%)	18 (39%)	46 (100%)

\* For  $\chi^2$  computation, first two rows combined, and last row excluded.  
 $\chi^2 = 28.0$  with 8 degrees of freedom.  
 Significance = 0.0005.

Table 7. Regular physician by kind and location of practice

Practice location	Regular physician ("objective")		
	M.D.	D.O.	Total
Study town	15 (31%)	23 (47%)	38 (78%)
M.D. hospital town	5 (10%)	2 (4%)	7 (14%)
Other	1 (2%)	3 (6%)	4 (8%)
Total	21 (43%)	28 (57%)	49 (100%)

$\chi^2 = 3.03$ , with 2 degrees of freedom.  
 Significance = 0.22.

Table 8. Clients' identification of own regular physician as osteopath or M.D.

Client's subjective perception of kind	"Objective" kind		
	M.D.	D.O.	Total
"M.D."	14 (66%)	1 (4%)	15 (31%)
"Medical—not osteopath"	2 (10%)	0	2 (4%)
"Osteopath" (occasionally "D.O.")	0	21 (77%)	21 (44%)
"Regular doctor, plain doctor, G.P."	3 (14%)	4 (15%)	7 (15%)
"Don't know"	2 (10%)	1 (4%)	3 (6%)
Total	21 (100%)	27 (100%)	48 (100%)

Table 9. Reported lifelong utilization of practitioners

<i>Utilization of chiropractors</i>	
Never	30 (61%)
A few times	16 (33%)
Many times	2 (4%)
Most often/exclusively	0
No data	1 (2%)
Total	49 (100%)
<i>Utilization of osteopaths</i>	
Never	9 (19%)
A few times	7 (14%)
Many times	4 (8%)
Most often	22 (45%)
Exclusively	5 (10%)
Don't know	2 (4%)
Total	49 (100%)
<i>Utilization of M.D.s</i>	
Never	6 (12%)
A few times	9 (18%)
Many times	10 (21%)
Most often	15 (31%)
Exclusively	6 (12%)
Don't know	2 (4%)
No data	1 (2%)
Total	49 (100%)

Only a few clients reported utilizing a chiropractor recently, though many more had done so at some point in their lives (Table 9). All of those currently utilizing a chiropractor also currently utilized an M.D., and none currently utilized a D.O. (Table 10). It is consistent with these data to hypothesize that clients of M.D.s overall are getting a smaller but similar proportion of manipulation as clients of osteopaths, but that the M.D.'s clients are getting their manipulation from chiropractors.

The client-practitioner relationships in this rural community were unusually stable: 20% of clients utilized the same "regular physician" all of their adult lives (Table 11), and 51% had not changed physicians within the previous 5 years. Only one person interviewed had no "regular physician".

In all cases of physician relationships of less than 5 years duration, the physicians were M.D.s; whereas,

Table 10. Relationship between current utilization of M.D.s, osteopaths and chiropractors

M.D. only	19 (39%)
M.D. and Chiropractor	2 (4%)
Osteopath only	28 (57%)
Total	49 (100%)

all but one of those of lifelong duration were osteopaths (Table 12). There are two alternative interpretations of these data. One possibility is that clients form longer-lasting relationships with osteopaths. Another is that there is a trend of shifting from osteopaths to M.D.s (consequently the osteopaths have fewer "new" patients). However, quantitative data on the number of physicians practicing in the study town and qualitative information make the latter interpretation appear unconvincing.

The data on current utilization of M.D.s and osteopaths should not obscure the fact that the great majority of respondents had at least limited experience at some point in their lives with both kinds of practitioners (Table 9). Consequently, most perceptions of them involved some personal experience. Only 12 percent of respondents reported no personal experience with M.D.s and only 19% reported none with osteopaths.

If perceptions of differences between M.D.s and osteopaths are compared with current rates of utilization there is, as one would expect, a strong association (Table 13). (The direction of causality is arguable.) Although there is an association, nevertheless, in terms of seemingly logical categories, there is considerable "slippage"—except for those with extreme opinions. And the bias of reported *perceptions* in favor of M.D.s is reversed to a bias of *utilization* in favor of the osteopaths.

## CONCLUSIONS

The data presented above demonstrate a *cognitive* bias in favor of M.D.s, but a countervailing *pragmatic* bias in favor of D.O.s. A similar situation is found regarding unorthodox medical subcultures in many parts of the world.

Table 11. Duration of relationship with regular physician

No regular physician	1 (2%)	
Less than 5 years, since moved to community	2 (4%)	
Less than 5 years, since married	1 (2%)	10 (21%)
Less than 5 years, since switched for other reason	7 (15%)	
More than 5 years, since moved to community	4 (8%)	
More than 5 years, since married	4 (8%)	25 (51%)
More than 5 years, since switched for other reason	17 (35%)	
All of adult life	4 (8%)	10 (20%)
Lifelong, following parents	6 (12%)	
No data	3 (6%)	
Total	49 (100%)	



Table 12. Duration of relationship with regular physician and kind of physician

Duration of relationship	"Objective"			Kind of Physician			
	M.D.	D.O.	Total	Subjective			
	M.D.	D.O.	Total	M.D.	Not differentiated	D.O.	Total
Less than 5 years	10 (53%)	0	10 (22%)	8 (47%)	2 (29%)	0	10 (22%)
More than 5 years	8 (42%)	17 (65%)	25 (56%)	9 (53%)	2 (29%)	14 (67%)	25 (56%)
All adult life	1 (5%)	9 (35%)	10 (22%)	0	3 (43%)	7 (33%)	10 (22%)
Total	19 (100%)	26 (100%)	45 (100%)	17 (100%)	7 (100%)	21 (100%)	45 (100%)
$\chi^2 = 19.0$ with 2 d.f. Significance = 0.0001				$\chi^2 = 17.2$ with 4 d.f. Significance = 0.0018			

Table 13. Perception of M.D.s and osteopaths compared to kind of regular physician utilized

Perception of difference	"Objective"			Kind of Physician			
	M.D.	D.O.	Total	Subjective			
	M.D.	D.O.	Total	M.D.	Not differentiated	D.O.	Total
1. M.D.s authentic	5 (100%)	0	5 (100%)	5 (100%)	0	0	5 (100%)
2. *M.D.s more inclusive	2 (67%)	1 (33%)	3 (100%)	1 (33%)	1 (33%)	1 (33%)	3 (100%)
3. *M.D.s more education	5 (62%)	3 (38%)	8 (100%)	4 (50%)	1 (12%)	3 (38%)	8 (100%)
4. *M.D.s more specialized	1 (50%)	1 (50%)	2 (100%)	1 (50%)	0	1 (50%)	2 (100%)
5. *Same	4 (25%)	12 (75%)	16 (100%)	3 (19%)	4 (25%)	9 (51%)	16 (100%)
6. *Don't know	0	2 (100%)	2 (100%)	0	2 (100%)	0	2 (100%)
7. *Osteopaths more inclusive	3 (30%)	7 (70%)	10 (100%)	3 (30%)	1 (10%)	6 (60%)	10 (100%)
8. *Osteopaths authentic	0	1 (100%)	1 (100%)	—	—	—	0
Total	20 (43%)	27 (57%)	47 (100%)	17 (37%)	9 (20%)	20 (43%)	46 (100%)
$\chi^2 = 12.7$ with 3 d.f. Significance = 0.0052				$\chi^2 = 41.2$ with 6 d.f. Significance = 0.028			

\*  $\chi^2$  computation, rows 2-4, 5-6, and 7-8 combined.

The conclusions from the quantitative data are entirely in agreement with my judgments based upon the intensive interviews that there is a curious sort of thinking about a medical subculture such as osteopathy, that involves contradictions between ideology and pragmatic behavior. The basic set of contradictions runs like this: Ideology enjoins medical orthodoxy. Individuals internalize the ideology to various degrees, but also have conflicting psychological needs, medical experiences (such as dissatisfaction with orthodox practices), and often perceptions of individual unorthodox practitioners (who seem to be capable). Finally, in a community such as this, unorthodox practitioners are in fact being utilized with satisfac-

tion. Each of these statements needs qualification, but I believe they represent a realistic summary.

The extent of ideological commitment to medical orthodoxy varies with time and other factors. In the U.S.A. it is just now declining from an apogee, but it is reflected in the scholarly neglect of osteopathy, and in the survey data on perception of physicians. For those who follow this ideological prescription, there are no contradictions except when an evidently orthodox physician's services are unpleasant, or obviously not efficacious. (And sufficient ideological commitment will overwhelm perceptions of inefficacy.)

However, in this community only a minority conform behaviorally to the ideology of orthodoxy.

Another minority profess no knowledge of or interest in differences between medical subcultures. But the majority both express awareness of the ideology and violate it to a greater or lesser extent. And their violation is not dictated by sheer availability of physicians or by strong economic pressures.

In the interviews, respondents repeatedly expressed that they *knew they were supposed to believe* in the exclusive legitimacy of M.D.s, but that they did not really believe it, or they were ambivalent. Respondents who made statements favorable to M.D.s often added apologetic statements such as, "I guess I've been brainwashed, but I think of M.D.s as better". (Several different respondents spontaneously used the term "brainwash".) Respondents who made statements favorable to D.O.s often prefaced them with remarks such as, "I know it's not supposed to be this way, but..."

The most prevalent situation was awareness that M.D.s are somehow supposed to be better, together with utilization of a D.O., which was likely to be rationalized in terms of "I just like my doctor" (who happens to be a D.O.). But a small minority not only utilized D.O.s preferentially and consistently, but identified them as such, and even developed a personal rationale for doing so, in explicit contradiction to the prevailing ideology. Such rationales tended to describe orthodox physicians as too limited (for instance, in terms of specialization, or of lacking manipulative therapy).

In addition to the foregoing perceptions of frank differences and putative differences, silent differences such as the "Town Clinic" sort of practice organization as well, probably play an important role in explaining the prevalence of "unorthodox" behavior.

Clearly, the difference between D.O.s and M.D.s is important to many clients, but not to others. Failure to identify one's own regular physician as a D.O. was not due to rapid change since this is a stable community with many enduring practitioner-client relationships. Similar numbers of D.O.s and M.D.s have been in the community for more than 20 years (Table 3), and the duration of relationships with D.O.s was longer than those with M.D.s. During this period of time, the status of osteopaths has risen so that it is now similar to that of M.D.s. The pragmatic preference for osteopaths thus apparently had become established in an even more unfavorable ideological environment than that of today.

Of course both the orthodox and the osteopathic subcultures include a range of physician characteristics with probably extensive overlap. The M.D.s in the study community, because they were among the minority of general practitioners in the orthodox U.S.A. medical subculture, and because they were Seventh-Day Adventists, were less different from D.O.s than most M.D.s would be. And the D.O.s in the study community, although they did use manipulative therapy, gave it less prominence than many D.O.s do. Consequently, this particular set of practitioners did not fully represent the amount of difference between the two subcultures as wholes. Nevertheless, even under these circumstances where differences were minimized in some respects, significant differences emerged in physician practices, and in client perceptions and behavior.

It may be that M.D.s fit the role of "doctor" in our culture in some ways better than D.O.s. At the very least, M.D.s have the orthodox academic degree. But that role is becoming so problematical, that many clients may be coming to prefer in some sense a less "doctorly" doctor. Whether or not osteopathic physicians are that, for many clients they are at least a distinct and pragmatically preferred alternative, in spite of the perception that to some extent osteopathy is unorthodox.

#### REFERENCES

1. An earlier version of this paper was read at the 1978 annual meeting of the American Anthropological Association in Los Angeles. The author wishes to thank the following for helpful comments on the earlier version: David G. McConnell, Ph.D., Fred L. Mitchell Jr., D.O., and Alice K. Raynesford.
2. Riley J. N. Western medicine's attempt to become more scientific: examples from the United States and Thailand. *Soc. Sci. Med.* 11, 549, 1977.
3. McCorkle T. Chiropractic: a deviant theory of disease. *Hum. Org.* 20, 20, 1961.
4. Leslie C. (Ed.) *Asian Medical Systems*. Univ. of California Press, Berkeley, 1976.
5. Fractions are based upon estimated numbers of D.O.s in 1977 and of M.D.s in 1976 in *Health Resources Statistics: Health Manpower and Health Facilities, 1976-77 Edition*, pp. 143, 146. National Center for Health Statistics, U.S. Public Health Service, Rockville, Maryland, 1979.
6. Nationally, general practice is more characteristic of D.O.s than of M.D.s: 53% of D.O.s compared to 20% of M.D.s (the latter including general practice, Family Practice, and "no specialty reported") according to *Hlth Res. Stat., op. cit.*, pp. 150, 155.
7. National ambulatory medical care survey: background and methodology, United States, 1967-72. *Vital Hlth Stat. Series 2*, No. 61. National Center for Health Statistics, U.S. Public Health Service, Rockville, Maryland, 1974.
8. These data on a single day's work are, of course, a very limited sample of the practitioners' activity. More extensive sampling would be necessary to account for seasonal variation and variation by day of the week, as well as random variation. The chiropractor, by his own account, had an unusually light day on the day sampled. Other apparent discrepancies in the number of patients served in this day are partly explained by the differences in scheduled office hours for that particular day, as suggested by the following data:

	Patients serviced	(Approximate) Hours scheduled	(Average) Minutes patient
MD3	50	7	8.4
MD5	48	6½	8.1
DO3	21	3½	10.0
DO4	41	5½	8.0
DO6	30	5½	11.0
DC3	18	8	26.7
Total	208	36	10.4

9. Although the quantitative data to be presented here do not include any cases of "simultaneous" utilization of D.O.s and of chiropractors, because the data are based on a small sample, it would not be accurate to conclude that this pattern does not exist in the community. However, it would be accurate to conclude that it probably occurs at a low rate. There were

- reports (not in the statistical sample) of some simultaneous utilization of D.O.s and chiropractors analogous to that of M.D.s and chiropractors described below.
10. Robinson D. E. *The Story of Our Health Message: The Origin, Character, and Development of Health Education in the Seventh-Day Adventist Church*, 3rd ed. Southern, Nashville, 1943/1965.
  11. Northup G. W. *Osteopathic Medicine: An American Reformation*. American Osteopathic Association, Chicago, 1966.
  12. Again the caveat applies that these data cannot be used to conclude that *no* physiotherapy is used, but they do suggest that it is used infrequently.
  13. McConnell D. G., Greenman P. E. and Baldwin R. B. Osteopathic general practitioners and specialists: a comparison of attitudes and backgrounds. *D.O.* (Dec.) 103, 1976.
  14. For instance, in a hypothetical constant pool of patients, if a different 10% received manipulation each year, then by the end of the 10th year all of the patients would have received manipulation.
  15. Freidson E. Client control and medical practice. *Am. J. Sociol.* 65, 374, 1960.

## BOOK REVIEWS

**Rural Health Development in Tanzania**, by G. M. VAN ET TEN. Van Gorcum, Amsterdam, 1976. 181 pp. \$9.80

**Integration of Church and Government Medical Services in Tanzania: Effects at District Level**, by T. W. J. SCHULPEN. African Medical Research Foundation, Nairobi, 1975. 301 pp. No price given

These two publications are among the few extensive and informative reviews of the utilization of medical facilities in rural Africa. Both deal with agricultural communities in northwestern Tanzania. The first, by a medical sociologist, focuses on a 12-month study of the utilization of health care facilities traditional and modern by residents of a village of 131 households and 876 persons in the Mwanza region south of Lake Victoria. The second, by a physician, assesses the utilization of one of the first integrated government-mission hospitals under Tanzania's 1969-1974 development plan. Because data for both studies were obtained during 1969-1971, shortly after the Arusha Declaration of 1967, neither comments on the subsequent effects of Ujamaa village medicine, although Van Etten discusses the training of Ujamaa paramedicals. The hospital in Schulpen's study was located about 150 miles west of the Van Etten study area and close to the northwestern border with Uganda.

Van Etten's study, while dealing with a small sample in a single area of rural Africa, is enormously provocative in that the data touch upon almost all of the current issues in African medical development. Consider the following: (a) out of 386 sick cases reported in the 12-month period, all but 6 presented themselves to some medical facility for treatment; (b) only 7.9% went to traditional healers, but among fee-paying patients these visits accounted for 47.9% of fees paid; (c) virtually all of the non-fee-paying patients, more than three-quarters of the cases, went to the nearest free government facility, in this case a dispensary, apparently without further evaluation of the facility; (d) the only times they went further were described as cases in which the nearest facility had run out of drugs, in which case they went to the next nearest free facility; (e) the usual distance patients were prepared to travel was 5 miles or less; in a separate review of cases at a hospital in the region, almost all patients came from within 5 miles of the hospital (in other words, patients went to either hospital or dispensary, whichever was nearest, apparently without evaluating the two facilities); (f) the minority of households prepared to pay fees to any facility (29%) consisted principally of wealthier families involved in cash-cropping (cotton) or comprised attendances during the immediate post harvest season when money was available; (g) all cases seeking private treatment in the modern sector (nine) involved visits to a nearby midwife for deliveries. Data of this type from more areas of rural Africa would give economists and medical planners a firmer idea of the demand for medical services and the types of facilities required. Van Etten concludes that Africans do go somewhere for treatment when they are sick and prefer a modern facility if one is available; that in spite of the stories one hears about enormous fees paid to traditional healers, such cases are very infrequent, and that what African countries require is a free, decentralized system (i.e. village paramedicals).

Van Etten also makes some observations about the training of paramedicals-to-be for the Ujamaa villages. Many of his comments follow the party line of the international health planning community, i.e. that trainees must

come from the villages in which they will work, that they must be trained in villages rather than towns (which presents problems because villages normally do not have buildings suitable for training programs), that they must be trained by persons other than physicians (which also presents problems, although nurses are certainly an alternative and many nurses do spend their careers in villages whereas few doctors do), and so on. One observation he makes struck this writer with particular force. Existing public health personnel (what he calls "health promotion agents") make a negative impact because in most cases they tell people what not to do, without rendering services in return. The best "health promotion agents" are health care providers, i.e. the village paramedicals, in Van Etten's view. Based on experience in rural Nigeria working with existing public health personnel together with new cadres of paramedicals, this reviewer would certainly concur.

Schulpen, a physician, was appointed to direct a new hospital which formed part of President Nyrere's plan to build on existing medical mission expertise in Tanzania and, in effect, to give over a large portion of rural hospital care to missions, leaving the government freer to focus on the Ujamaa program. Under the scheme, missions controlled appointments and policy at the hospitals, and received annual grants from the government. Schulpen's detailed and obviously sincere evaluation of his own hospital unfortunately fails to give us a picture of the impact of the policy elsewhere in Tanzania, but one gathers that particular hospitals in the scheme succeeded or failed largely because of the personalities of the mission doctors involved.

Schulpen does, however, give us an interesting view of presenting illnesses at a modern hospital in rural Africa, a view in many ways contrasting with the picture one gets from other (usually urban) African hospitals and clinics. Observers, both African and foreign, have noted that a very small proportion of disease conditions find their way into the modern medical system (estimates vary between five and twenty percent), and it is from this small proportion that most official reports on African medicine originate. Such reports are biased toward diseases presented at hospitals and, by extension, in urban areas. And urban disease focus on the usual cast of characters in Africa: pneumonias and upper respiratory infections, diarrhoeas and gastrointestinal disorders, plus our old friends among the communicable diseases such as measles and tuberculosis. Schulpen's list of combined in-patient and out-patient cases for the year 1971 include the above, but the above are not in the lead and in fact are often miniscule in their prevalence.

The leaders are the vector-borne diseases. Of 31,288 cases presenting, malarias accounted for 7155 (22.9%) and the vicious category of blood-sucking intestinal worms (mostly ankylostomiasis or hookworm, although others appeared) for 3611 cases (11.5%). Gastroenteritis and dysenteries accounted for 1758 cases (5.6%); pneumonias for 988 cases (3.2%); measles, 640 cases (2.0%); tuberculosis, tetanus, and leprosy together comprised only 95 cases; while hypertension and diabetes, two favorites of the urban African physician, comprised only 18 cases. Schulpen also notes the prevalence of eye and dental diseases (almost 5% of presenting cases). Two of the vector-borne leaders in many African reports, schistosomiasis and trypanosomiasis (also called bilharzia and sleeping sickness) are minor (1% or less), which is surprising considering the nearness to Lake Victoria and Tanzanian location.



These figures obviously reflect local definitions of disease as well as actual disease conditions, and Schulpen mentions a TB control program in the area (there may have been others). Nevertheless there is a message for health planners here, and the message is that more baseline research is required before rural medical planning can be carried out effectively in tropical Africa.

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**Youth Drug Abuse, Problems, Issues and Treatment**, edited by GEORGE M. BESCHNER and ALFRED S. FRIEDMAN. Lexington Books, Lexington, MA, 1979. 656 pp. \$26.50

This volume covers a broad range of topics including epidemiology, the social, psychological, pharmacological and legal aspects of drug abuse, research and methodology, and implications for planning and public policy. Recent research findings, especially regarding the epidemiology of drug use among youth are the primary focus, as many of the authors draw on material extracted from the new National Youth Polydrug Study (NYPS), a national data base which sampled clients in various youth drug treatment programs throughout the country. This data is compared with three other national drug abuse data bases, namely CODAP, DAWN and DARP, and with local research studies. Despite the focus on young drug abusers, the general reader will find this volume extremely helpful in presenting a comprehensive view of current drug abuse problems in America. Because of its use of a single national data base, it is possible to tie together many diverse issues in a relatively coherent fashion and to provide a basis of comparison that has previously not been possible between research studies from various parts of the country.

While this book aims at a comprehensive view of the drug abuse problem, this is difficult to achieve since the data base focuses solely on individuals in treatment programs. As some of the authors demonstrate, there is clear evidence that significant numbers, if not the majority of individuals abusing drugs never make contact with any treatment system. Thus, while this book provides an up-to-date review of the best available data, it must still be recognized that it is difficult to adequately understand the drug problem, do rational planning, or develop appropriate public policy utilizing information based on a minority of the population concerned and a group that may present more serious problems than those experienced by the majority of drug users. Given this limitation, this is nonetheless an extremely valuable volume that provides the best available current information in an easily accessible form.

This book is well organized, with the editors providing a worthwhile introductory chapter and preface as a guide to the remaining chapters. For the general reader, the major criticism is the primary emphasis that this volume places on epidemiology. Many chapters seem to review similar types of information without providing significant new insights. This detailed focus on the statistical analysis of epidemiologic studies will be of interest primarily to researchers in that field. By far, the most useful chapters are those that deal with drug abuse from a more general perspective. The editor's introduction gives an evenhanded view of the ambiguities and conflicts that have plagued this field, particularly the difficulty in evaluating the effectiveness of any type of drug abuse prevention program and the concerns many planners have about the continued expenditure of public funds in areas where it is so difficult to document effectiveness. Hunt, Farley and Hunt's extremely perceptive and readable chapter on the spread of drug use

makes the clear point that this behavior is best understood as a "fad". Other chapters attempt to answer various questions related to how the problem spreads and other determinants of drug use patterns, but it is difficult to ignore the simple wisdom of Hunt's perspective. It is particularly helpful to recognize that this behavior may be little different from other fad behaviors prevalent among adolescents.

Beschner and Treasure's chapter on "Female Adolescent Drug Use" is also useful. They point out the close relationship between patterns of drug abuse between girls and boys, yet they also present interesting information regarding subtle differences in female drug use patterns and highlight the fact that most treatment programs are ill-prepared to deal with young women experiencing drug problems. Schnoll's chapter on "Pharmacological Aspects of Youth Drug Abuse" is comprehensive, accurate and up to date. The chapter on marijuana decriminalization by DuPont is a balanced presentation of the pros and cons of the decriminalization issue and will be helpful to those interested in public policy. Of similar value are the chapters on inhalants and solvents and on phencyclidine (PCP). Since the abuse of these drugs is a relatively new problem, it is helpful to have this information available in such a well organized fashion. Given the editor's desire to present a comprehensive review of drug abuse problems, it is unfortunate they did not include chapters on barbiturate and sedative-hypnotic abuse.

One of the most provocative chapters is Brunswick's essay on "Black Youths and Drug-Use Behavior", a review of a long-term study of drug use in Harlem. This chapter is particularly valuable because it provides information on many opiate abusers who might not otherwise be seen in the treatment or criminal justice systems. Of particular note is the evidence that significant numbers of heroin addicts stop on their own without treatment and that these individuals have a fairly positive prognosis. In contrast, addicts who require treatment to detoxify or to deal with their drug problems represent a significant subsample of the drug-using population and seem to include individuals with more severe pathology and a greater need for treatment and supportive services.

The chapter by Smith, Levy and Strair on treatment services is an extremely comprehensive and insightful review of the changing philosophies that have characterized drug treatment modalities over the last decade. Despite the focus on youthful drug abusers, this chapter gives a broad perspective on the development of treatment services for all drug abusers.

The Sells and Simpson chapter on the outcome of treatment presents encouraging results on the effectiveness of treatment, particularly on a group evaluated 4-6 years after treatment. More long-term followup studies of this nature are needed.

In summary, this volume will be of value to anyone working in the fields of drug treatment, prevention or health-planning. It covers a wide range of topics including some of the most recent research on drug abuse and includes many articles that clarify the philosophic and programmatic issues that continue to create controversy in this field.

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**The Disordered Mind: What We Know About Schizophrenia**, by PATRICK O'BRIEN. Prentice-Hall, Englewood Cliffs, N.J. 1978. 304 pp. No price given

The author, a graduate of Yale and of The Johns Hopkins Medical School, is Clinical Instructor in Psychiatry at the

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Massachusetts General Hospital, Harvard Medical School, and has been Associate Director of The Private Psychiatric Consultation Service. O'Brien prefaces his text with the note that he has not included discussions of childhood schizophrenia, psychological and psychophysiological research on schizophrenia, or legal issues; and has limited discussion of other topics such as developmental theories in schizophrenia. These selections were made "to keep this a relatively short and practically oriented book".

The format includes an introduction, four sections each with 3-6 chapters, more than 20 pages of notes, references and an index. "The Diagnosis and Course of The Schizophrenic-Type Disorders" are summarized in "Some Misconceptions... What Schizophrenia Is... What Schizophrenia Is Not... Types of Schizophrenic Disorders... (and) Recovery From the Schizophrenic-Type Disorders." The Acute and Chronic Schizophrenic-Type Disorders and Borderline Condition are chapters under Schizophrenic-type disorders in "Everyday Life;" and "The Causes" are reviewed in "An Approach to The Developmental Theories... Inherited Disorder... (and) Biochemical Theories." Six classes of treatment comprise the final section—brain surgery, electroshock, drugs, megavitamins, hospitalization (a dimension different from the other five), and psychotherapy.

The "General Reader" is instructed that the chapter on misconceptions and the summary section at the end of each chapter convey "much of the essential information relatively *independently of the chapters*" (italic is by the reviewer). The "specialist... Students of the social sciences or those involved in clinical work" are advised to attend to the "Notes". The primary objective of this book, however, is to clear up misconceptions... as to the types of schizophrenic disorders... their causes and treatment... telling you what we don't know—what is a useful hypothesis, and what is pure speculation; what is manifestly misleading, and what is simply false."

There is difficulty, of course, in writing a single text for the general public and for students, scientists and professionals, and O'Brien has not resolved how best to meet this multi-level problem. Use of "schizophrenia" and "schizophrenic-type disorders" often appear to be synonymous but is confusing to the reader; are the terms interchangeable?... "I have been describing schizophrenia, of the schizophrenic-type disorders, as a residual group of psychoses of unknown origin." Further, there are professionals who would challenge such statements as "Psychosis... is an expression of utter defeat and hopelessness"; or "Though we speak of chronic schizophrenia (or the 'chronic psychoses of unknown origin'), in fact, such individuals, with current approaches to community care, are rarely truly psychotic."

After re-reading the text, this reviewer concludes that it best serves the general public and students. The major strengths are the author's comprehensive review, the opening chapter on 40 misconceptions, each followed by "FACT", the 22 pages of Notes, and the 119 summary statements for the other 16 chapters. Only two statements appear for megavitamin therapy; 3-6 each for types of schizophrenic disorders, recovery phenomena, genetic factors, biochemical theories, brain surgery, and psychotherapy; seven to nine summary statements for what schizophrenia is, the acute "schizophrenic-type" disorder, the "borderline condition", developmental theories, and hospitalization; and 13-16 statements for what schizophrenia is not, the chronic schizophrenic-type disorders and electroshock therapy.

**Wholistic Health. A Whole-Person Approach to Primary Health Care.** by DONALD A. TUBESING. Human Sciences, New York, 1979. 232 pp. \$14.95.

Wholistic medicine is one of those modern snake oils that is sure to catch our attention, especially when the concoction is packaged with "primary care". This book is written for "people who work within the health care system". The author, a minister and educational psychologist, calls for a "redefinition of health and illness in the context of a broader view of life, health and the quality of life to include the whole person—the mental, emotional and spiritual sides of life as well as the physical". He describes the Wholistic Health Center, "an innovative model for primary health care" which seeks to redress the deficiencies of the current health care system.

*Wholistic Health* begins with a broad examination of the problems of American health care and identifies the usual culprits: impersonal harried physicians who make their patients wait and are not available when needed; lack of preventive services and health education; high costs; inattention to psychosocial and spiritual concerns; neglect of the "whole person"; and lack of a sense of personal responsibility for health. The analysis is offered in a grandiose, apocalyptic style—"Yes, there's trouble: The gloom and the doom"—which I find cloying. The presentation is wordy, yet simplistic, and while I am sympathetic to the concerns raised, I thought the discussion annoyingly naive.

The author then describes a church-based fee-for-service, family practice, staffed by a family practitioner, nurse, secretary, volunteers, and a pastoral counsellor. Four model centers have been opened in Ohio and Illinois, supported by private grant monies and sponsored by the University of Illinois; four more are planned. The centers also offer annual health evaluation packages for businesses as well as courses on such topics as stress and empathy. The project is described in glowing terms with frequent claims of attending to the "whole person", but there is little convincing evidence that new solutions have been developed or that the author's good intentions have been translated into an operation which substantially improves on other family health centers. Data on quality of care, costs, availability and satisfaction are crude or non-existent. The experience of providing or receiving care is never described in the detailed manner which would give the reader a clear sense of the center's practice. Transcripts or case reports would have been helpful.

The emphasis on spiritual or existential dimensions of health is unusual and at times, enchanting. Intake begins with a health assessment, including a brief 20-minute conference, usually dominated by the pastoral counsellor. History-taking focuses on stress; counselling is said to address such issues as meaning, faith, and commitment. Unlike other projects which attempt to integrate psychosocial and biomedical care by including, for example, psychologists or psychiatric social workers in the primary care team, the Wholistic Health Center apparently is centered around the pastoral counsellor rather than the physician. An intelligent appraisal of pastoral counselling in ambulatory care would be most welcome. The majority of patients, 25-45 years old, relatively healthy, affluent, and educated may well find their needs better addressed in the Wholistic Health Center than in the usual forms of practice. Such an approach might be less successful in caring for a sicker, poorer, more elderly population.

Taking a broader perspective on the project, one wonders if medical imperialism is now engulfing religion. Or is organized religion getting into the "human potential" movement by dressing its agents in white coats? No one should be surprised that there is unused space in American churches and that their back rooms are available to be

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turned into clinics. But why don't the clients seek help by entering at the front door?

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**France Faces Depopulation; Postlude Edition 1936-1976**, by JOSEPH J. SPENGLER. Duke University Press, Durham, N.C., 1979, 383 pp. \$17.75.

This book is a re-edition of Spengler's classic work published in 1938 to which has been added a "postlude" concerning France's demographic evolution from 1936 to 1976.

The reader who specializes in demographic matters and population policies will find some useful references, bibliographical notes and statistical data. The first part of this book concerns France's demographic changes from its origin to 1936, with a special emphasis on the late XIXth century and early XXth century. There is abundant documentation on French literary and political reactions toward decrease in natality, and the measures which were then taken to promote natural increase in population are well described. However, a lay reader may find this text difficult to follow, because of the lack of illustrations and statistical figurations, because of the masses of numerical data, and because of the dryness of the text. It does not adequately describe what happened to France's demographic status and the "soul of the country" in terms of political, social, and psychological changes. Changes in religious attitudes and consequently in morals which profoundly affected the country from the XVIIth century are almost overlooked. Moreover, the author appears to be unfamiliar with France's geographic diversity and the inequality of wealth distribution among the various regions of the country, which makes his description of population shifts from one department to another, from countryside to town, quite lifeless. In addition, there are repeated allusions to "eugenism", and "genetically superior populations" which are quite disturbing, especially when found in a 1979

re-edition. Finally, the most interesting aspect of the first part of the book may be the contrast between the "scientific", quasi mathematical attitude that the author takes toward France's demographical changes and the failure of his predictions. J. P. Spengler said in 1936 that French population would amount to 38,283,000 in 1960, 29,600,000 in 1985, and assumed that a population of 42 millions "in a country with the territory and resources of France was considerably in excess of the optimum". French population was 53,280,000 in 1978, with an economic growth greater than that of other European economies since World War II, and with a Capita Gross National Product in 1969 exceeding that of the United Kingdom, and of West Germany.

The "postlude" is the most valuable part of the book, but also unfortunately the shortest. It is well written, concise and well documented. It gives a clear account of population trends in France since World War II, and of the moderate success of governmental population policies. There is also good insight into the reasons for which French people do not have large families: not really because of lack of finances, but because "the wants of the French people (as of most nations) are in excess of their current capacity to satisfy".

However, the historical and sociological context of the large movements of populations which happened in France since World War II are largely ignored. There is no mention that in three months France had to absorb a surplus of one million of its overseas citizens fleeing from former territories. There is not even mention of the importance of foreign manpower in present day French economy, despite its deep human consequences.

Therefore, J. P. Spengler's book should be recommended to all scholars interested in demography, and must be considered as an invaluable source of data on France's population changes and shifts. This book may not however satisfy the reader in search of sociological information or historical overviews.

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JACQUES SUAUDEAU

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## CORRESPONDENCE

### AUTHOR'S REJOINDER TO A BOOK REVIEW

To the Editor.

Dear Sir,

Snow's review of my *Study of Abortion in Primitive Societies* (2nd edn, 1976) which appeared in Vol. 10, No. 9/10, Sept./Oct. 1976, claims to speak for the "scholarly reader" and the "outraged professional". I will disregard its vituperative and sarcastic tone and concern myself only with substance.

#### (1) Theory and method

I note that half of Mead's review of the first edition of this book was devoted to the incriminated theoretical chapter, which she called "brilliant" and, unlike Snow, summarized correctly. Also, in a paper she contributed to my (forthcoming) *Festschrift*, she cites verbatim and with approval (from another of my books) my own summary of the theories and methods in question. This chapter is, moreover, included also in a volume of my principal theoretical papers (p. xiii), now available in five languages and therefore hardly negligible.

Unlike Mead, Snow failed to comprehend that, for *specifiable* purposes, no distinction may be made between "myth and memorate, folk tale and legend, hearsay and eyewitness account", nor between real (needle) or imaginary (ghosts) agents of abortion.

#### (2) Challenged authorities

(a) *The Old Testament*, (indirectly) cited once, is clearly the best evidence for the Jewish religious tenet that abortion is a heathen abomination.

(b) *Herodotus*. Many of his most surprising statements have since been confirmed by archaeology. He reliably reported even an information he doubted (4.42) and which, in the light of modern knowledge, proves his doubts to have been unfounded.

(c) "Ancient histories" (unspecified) are often reliable. Thus, the person of Mopsus and his emigration to Cilicia were believed to be mythical, until recent epigraphic finds proved this "myth" to be history.

(d) *Missionary accounts* are particularly apt to be reliable on sexual matters. "The vehement accusations of infanticide made by early missionaries (Chaco region) have, in fact, been borne out by modern evidence" (A. Métraux, *Handbook of the Indians of South America*, I, p. 319.) Also, many first rate and indispensable ethnographies were written by missionaries (Junod, etc.).

(e) "An 1809 travel book" (Azara). This reliable work is repeatedly cited in the aforementioned authoritative *Hdbk*, which also confirms Azara's data concerning the frequency and casualness of abortion and infanticide in the Chaco (Mbaya, etc.), and explains "the rapid decline of so many Chaco tribes" (*Hdbk*, *ibid.*, p. 319). Azara's eyewitness account is thus credible.

(f) "A single native woman" can credibly describe a practice common in two Australian tribes she knew well, for abortion and even the feeding of the youngest sibling to the older ones (Hewitt, etc.) is well attested for Australia. (On a more general level, Snow forgets that, on *some* topics, there can only be *one* informant, e.g. on dreams or on shamanistic experiences.)

#### (4) "Factual" statements

(a) It is untrue that no information on the bibliography is given until pp. 168 ff: cf. pp. 5-6, which also list abbreviations. It is, moreover, natural for *detailed* bibliographic information to be given on pp. 168 ff: that is where the *Source Book* begins.

(b) My use of Ploss-Bartels (*PB*) is grossly misrepresented. Data first located through *PB* are occasionally cited in the text as derived from *PB*. In the *Source Book*, however, the same data are cited from the primary source, whenever it could be located—which was most of the time. The *Source Book* also lists the inaccessible primary sources quoted by *PB*. Also, in the text, I cite *PB* only on readily credible points. The few ascertainably incorrect *PB* statements are not cited anywhere. I did state that *PB* was found to be 90% correct, but included in the remaining 10% even very slight inaccuracies—often involving mere nuance. Also, I have just checked the letter A section of the *Source Book*: of data on 42 tribes, only 7 (1/6th) are cited directly from *PB* and all concern totally commonplace matters.

(c) "The foetus is often aborted" to permit a better care of living children. In the text (p. 103) I cite one example only. The *Hdbk*, *op. cit.*, p. 320 mentions this motive for the Chaco in general and Snow could have located dozens of additional cases by consulting the (unmentioned) *Tabulation* (Col. I, symbols P. and Pc.)

Snow also alleges that I use this one example to "demonstrate" the mother's (I wrote: parents') regression to her (i.e. their) own sibling rivalry. I call this simply an "inference" and "suggest" that memories of early drudgery on behalf of a younger sibling may provide "additional support" for resentment over parental drudgery.

(d) *Formosa*: regular abortion of young women (also reported from the Mbaya, *Hdbk*, *op. cit.*, I, p. 319). Not-so-scholarly Snow, who (rightly) sets up the Yale (HRAF) files as a standard of reliability, did not trouble to take a few minutes to ascertain that two of my three (concording) sources are included also in the HRAF (which is, in fact, cited on *Formosa*, on p. 230). Snow also cites (in disproof?) the words: "in ancient times", but not the words: "it is an ancient practice" (five lines earlier). Obvious meaning: this custom is not of recent origin. But even if a custom becomes obsolete (as it is now) it was a custom once and therefore, like the now obsolete custom of scalping, is still of concern to the anthropologist. In short, Snow did not take the trouble either to read my text carefully, or to check the HRAF bibliography.

(e) *Marital discord* as a motive is allegedly discussed on p. 154 (which does not mention this topic) and is allegedly substantiated (on pp. 186-7) by one second-hand case only. Actually, I cite on this topic, pp. 17-18, six first-hand sources and the *Tabulation* (Col. I, symbol Q) lists a total of 18 groups. Obviously Snow did not consult the *Tabulation* at all. Also, a modern clinical case (intention) is cited on p. 384.

I am compelled to conclude that all of Snow's "factual" statements are wrong.

Considering Snow's review I deem it unnecessary to comment on his approbrious epithets. I must stress that this book (written disinterestedly in 1955, when abortion was not a "hot" topic) was not republished for mercenary reasons. Actually the book was reprinted chiefly because Dr J. N. Anderson, Research Professor of Anthropology (University of California, Berkeley) strongly urged that it be rapidly reprinted.

Reviews of this type raise questions about the responsibilities of reviewers, for they could dishearten young and promising colleagues who, unlike reviewers of Snow's ilk, have something new to say. This consideration alone impelled me to write a *Rejoinder*, for at my age one can safely take as one's motto the Arab proverb: "Dogs bark, but the caravan passes".

Yours sincerely,  
GEORGE DEVEREUX



## PUBLICATIONS RECEIVED

- Ahmed, Paul I. and Plog, Stanley C (Eds) *State Mental Hospitals: What Happens When They Close*. Plenum, NY, 1976. 219 pp. \$25.00
- Brewer, Garry D. and Kakalik, James S. *Handicapped Children, Strategies for Improving Services*. McGraw Hill, Hightstown, NJ, 1979. 612 pp. \$19.95
- Bulka, Reuven P. *Mystics and Medics: A Comparison of Mystical and Psychotherapeutic Encounters*. Human Sciences, NY, 1979. 120 pp. £4.95 (paper)
- Doyal, Lesley with Pennell, Imogen. *The Political Economy of Health*. Pluto, London, 1979. 360 pp. £4.95
- Fox, Daniel M. *Economists and Health Care: From Reform to Relativism*. Prodist, NY, 1979. 103 pp. \$7.95
- Fox, Renee. *Essays in Medical Sociology: Journeys into the Field*. Wiley, NY, 1979. 548 pp. \$19.95
- Hafner, H. (Ed.) *Estimating Needs for Mental Health Care*. Springer-Verlag, NY, 1979. 136 pp. \$18.70
- Huygen, F. J. A. *Family Medicine: The Medical Life History of Families*. Royal Vangorcum, The Netherlands, 1979. 164 pp. Dfl. 35
- Langs, Robert. *The Listening Process*. Aronson, London, 1978. 611 pp. £21.00
- Lerner, Leila (Ed.) *Masochism and the Emergent Ego: Selected Papers of Dr Esther Menaker*. Human Sciences, NY, 1979. 384 pp. \$19.95
- Mechanic, David. *Future Issues in Health Care: Social Policy and the Rationing of Medical Services*. Free Press, NY, 1979. 194 pp. \$13.95
- Plog, Stanley C. and Ahmed, Paul, I. (Eds) *The Principles and Techniques of Mental Health Consultation*. Plenum, NY, 1977. 234 pp. \$19.50
- Rehr, Helen (Ed.) *Professional Accountability for Social Work Practice: A Search for Concepts and Guidelines*. Watson, 1979. 208 pp. \$14.95
- Riedel, Ruth Lyn and Riedel, Donald C. *Practice and Performance: An Assessment of Ambulatory Care*. Univ. of Michigan School of Public Health, 1979. 306 pp. \$18.50
- Shapiro, Eileen C. and Lowenstein, Leah M. (Eds) *Becoming a Physician*. Ballinger, Cambridge, MA, 1979. 288 pp. \$22.50
- Smithers, David Waldron. *Dickens's Doctors*. Pergamon, NY, 1979. 111 pp. \$15.00
- Sultz, Harry A., Henry, O. Marie, Sullivan, Judith A. and foreword by Scott, Jessie M. *Nurse Practitioners: USA*. Lexington Books, Lexington, MA, 1979. 237 pp. \$23.95
- Usdin, Gene and Hofling, Charles J. (Eds) *Aging: The Process of the People*. Brunner/Mazel, NY, 1978. 248 pp. No price given
- Ward, Colin. *The Child in the City*. Penguin, Hammondsworth, 1979. 221 pp. £2.95

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## ANNOUNCEMENT

### CALL FOR PAPERS

#### Volume 3 of *Research in the Sociology of Health Care*

This is a call for possible contributions to Volume 3 of the annual series on *Research in the Sociology of Health Care* published by JAI Press and edited by Julius A. Roth. Volume 1 is now in press and will be published in 1980. Volume 2 is in the process of writing and editing. It is hoped to be able to organize Volume 3 in terms of a specific theme as with the first two volumes. The two themes being considered for Volume 3 are given below.

They may be up to 100 typescript pages, though most of those selected will probably be between 50 and 75 pages. They must be original writings, not reprints of previous publications or writings which have been or are being published in similar form elsewhere.

An initial offer of a contribution might most appropriately be in the form of a brief prospectus or a letter giving a brief summary.

All initial inquiries or drafts sent for the first time should reach the undersigned by October 1, 1980.

Correspondence concerning this volume should be addressed to Julius A. Roth, Department of Sociology, University of California, Davis, CA 95616.

A statement of the themes follows:

#### DETERMINATION AND CONTROL OF PERFORMANCE AND COST OF HEALTH SERVICES

The cost of health services is a major public issue. Concern with cost is necessarily accompanied by concern with "quality" of service (that is, performance), ways of measuring performance, and the relationship of performance to cost. Efforts to control cost have had an impact on the ways in which health services are performed and on the "quality of care" as defined in various ways by consumers, providers, planners, and health administrators. Specialists in social medicine, economics, the social sciences, and others address such issues as:

How the structure of services affects performance and cost and how cost factors affect the structure and quality of services;

How specific cost control mechanisms affect performance of services;

How various payment schemes affect costs and utilization patterns, outcome of treatment, availability of services, and how they encourage or discourage use of physicians and non-physician providers.

I am seeking papers which preferably move beyond the ideas and assumptions which have become taken for granted in this area by both researchers and policy makers. The analysis should *not* be a strictly economic one (although economic considerations will often be central), but deal with explanations of decisions and actions which involve issues such as relative power, organizational structure, location in the social system, and/or nature of interaction between parties to a service relationship.

#### INTERNATIONAL COMPARISONS OF HEALTH SERVICES

As the title implies, this is intended as a descriptive and interpretive comparison of health services in two or more countries. Papers may be reports of studies of several countries or a study of one country with a comparison to literature sources concerning other countries, or a comparison of literature sources which makes an important interpretation not made by the original sources. Comparisons may be comprehensive or may focus on a particular aspect of health services. Simply a description of the services in two or more countries is not sufficient for inclusion in this volume. The important point is to attempt explanation for the differences and/or the effects of the differences. It may include an effort on the part of the author(s) to draw more general principles of relations between various factors of social structure, historical conditions, political action, development of technology, and so on.

#### THE SOCIAL IMPACT OF MEDICAL TECHNOLOGY

Recent developments in sophisticated medical technology such as CAT scanners, heart transplants, kidney dialysis, electronic fetal monitors, neonatal ICU equipment, and *in vitro* fertilization raise social issues about the appropriate societal allocation of resources, the efficacy and safety of new technology, costs related to benefits and to both individuals' and society's ability to pay, and control over medical research and clinical practice. Papers for this volume should address these types of issues and questions about the manipulative or coercive potential of technology, the roles of policy-makers, medical scientists, providers, consumers, and regulatory agencies in the dissemination of new technologies. Papers which address the pressures for the adoption and dissemination of high technology approaches as compared to pressures for expansion of the low-technology primary care sector of the health care system would also be appropriate.

The papers should *not* be technical discussions of either the medical or economic ramifications of specific technologies, except as necessary to make the sociological points understandable. What is sought are sociological analyses of the social organization of medical science and clinical practice as they are evolving in relation to new technologies.

## ANNOUNCEMENT

### REDUCED SUBSCRIPTION RATES

WE WOULD like to draw the attention of our readers to the fact that specially reduced subscription rates are available to *bona fide* members of certain relevant professional organizations. For further details and inquiries please write to:

DR P. J. M. McEWAN  
Glengarden  
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Aberdeenshire AB3 5UB  
Scotland

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## ERRATUM

In Vol. 13B p. 227 the review of *Social Security and Medicine in the U.S.S.R.* by Vicente Navarro was reviewed by Boris Segall and Raymond T. McNally NOT "published" by them as erroneously printed.

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Announcement

THE SEVENTH INTERNATIONAL CONFERENCE  
ON SOCIAL SCIENCE AND MEDICINE

will be held at

**The Leeuwenhorst Congress Centre, Noordwijkerhout, Netherlands**

**June 22nd-26th, 1981**

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The themes on this occasion will be:

- Assessing the therapeutic effectiveness and financial efficiency of medical care
  - Bases and determinants of value judgements in medical affairs
  - Comparative studies of health care systems
  - Fashion and rationality in the allocation of health resources
  - Health care finances in a contracting economic environment
  - Ideologies, social policy, health and the structure of health care
  - Methodological consensus and conflict in the health and social sciences
  - Pre-scientific medicines; their extent and value
  - Problems of dependent groups—the care of the elderly, the handicapped and the chronically ill
  - The contribution and development of spatial epidemiology
  - The contribution of psychological and social phenomena to an understanding of the aetiology of illness and disease
  - The distribution, prescription and advertising of drugs; patterns, problems and proposals
  - The optimum utilisation and appropriate responsibilities of allied health professionals
  - The relationship between action and research in health policy
  - The relevance and performance of medical social scientists in developing countries
  - The relevance of the history of medicine to an understanding of current change
  - The role of the public in the planning, management and evaluation of health activities and programmes, including self-care
  - The social sciences and dentistry; current influence and future opportunity
- 

The registration fee will be Dfl. 300 (\$165, £75). For further details please write to:

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## EDITORIAL COMMENT

The term "orthodox" in relation to the form of medicine prevailing in Poland was heard by myself for the first time some months ago in Boston. At the same time I also learned that the phenomenon I am to lecture about is called "non-orthodox". I have never dealt with that issue before and I do not pretend to be competent in it. All I want to do is to report on an interesting social event that is occurring in Poland.

A spiritual healer, Clive Harris, a 34-year-old Englishman, has been visiting Poland for some years, about once or twice a year. Since there is growing informal publicity surrounding his visits, the last two have been studied by a group of undergraduate students of sociology at Warsaw University as participant observers.\* In the present report, Harris's 3-week long visit in autumn 1978 will be described.

In 14 towns Harris received a great number of people, about 240,000 in total, at an average 1200-2000 persons per hour for 10 hours a day. The patients were carefully checked. For example, in Warsaw it was announced in advance that first of all would be accepted patients with medical certificates including diagnosis and localization of a disease. ("Consult with the physician for the type and localization of your disease... first will be accepted patients who enclose... medical certificates.") In Warsaw, 70% were such patients. The applications were collected by the churches. The entire action also took place in the churches. In Warsaw there is a special place provided for Harris in a Dominican convent, the same for all visits. It also embraces a huge garden. Practically two public streets "belong" to this place also. They are crowded during Harris's visit several hours in advance and vehicles are banned.

The entire action was realized thanks to the excellent, efficient organization supervised by a group of private persons, mainly young people, among them physicians. They were helped by many volunteers whose numbers increased so quickly that there was no work for some of them. The work was very hard: many hours of controlling patients' traffic, keeping order outside and inside the churches, helping ill and disabled people, carrying wheelchairs, stretchers, chairs with patients, etc. Nevertheless, the volunteers were present everywhere. Also the support offered sometimes by the local authority has to be mentioned here. In one of the towns, for example, where the action was held on Sunday, the shops were opened and the trams stopped. Often the police helped, sometimes the fire-brigade. In another town, the mentally handicapped young people helped.†

Clive Harris heals by touch, by laying-on his hands. He is likeable, straightforward, winsom. According to his own words, the only task and aim in his life is to heal people. He has been doing it for over 20 years travelling to various countries and continents. He does not accept money or royalties for his activities; he is financed by private donors. Harris is not interested in the medical results of his healing but he willingly agrees to them being investigated by the scientists. ("The scientists say that I heal or bring improvement in 70-80% of certain diseases".) Mostly he appreciates patients sent to him by the physicians. It was rather difficult for us to define the scope of the religious element in Harris's activity. He says that similar to other gifted people, he was given special abilities from God and he has to use them to the highest degree in the disinterested help based on Christian love. It is known that religion plays a considerable role in a spiritual healer's performance and that the specific mood, atmosphere of concentration is important. It refers above all to a healer himself who seems to require such concentration because there are, at least in case of Poland, no conditions allowing such mood for people. People stay for hours in a tide line slowly processing towards a touch which lasts about 3 seconds. In the case of Poland, it has to be remembered that the Church provided a place and an easy, quick, spontaneous and unformalized organization.

Apparently crowds wait for Harris everywhere. Maybe in Poland they are bigger than in other countries because it is a phenomenon on this scale. There are some quacks operating‡ but Harris differs considerably from the already known types. His sensation and popularity in Poland are undoubtedly increased by his nationality and the place where the meetings are held.

The group of Harris's patients differ from the total population in the fact of their being ill and in a relatively high level of education: namely, every fourth respondent to the questionnaire on which results I base these observations, had a completed higher education. These results surprised the authors of the questionnaire.§

\* Mainly by Marek Kański and Stanisław Wasilewski.

† On March 1, 1979 a new 3-week long Harris's visit to Poland began. This time he was expected to receive 330,000 persons in 13 towns (on an average 15,000 persons a day). Each town set up a special organizational committee independent of the organizers in Warsaw. In Warsaw on February 5, there was only one notice posted up in one of the churches announcing Harris's visit and asking applications to be sent on February 18-28th to the post-box at the Central Post Office. During the first 5 days, i.e. earlier than expected, about 50,000 applications came in.

‡ There are no systematic empirical studies on this. Also very little is known about various healing systems throughout the world. The general attitude is oriented toward highly scientific medicine.

§ Conducted by Krzysztof Jasiewicz and Jerzy Działłowski. 600 persons in 4 towns responded to it. The above results are taken from the authors' relations at the special meeting of the Polish Sociological Association on 28 November, 1978. The high percentage of persons with higher education among Harris's patients may show that the intelligentsia was usually better informed and was able to find an opportunity of being received by Harris.

Being sure that among patients under study there would not be such persons, they did not prepare appropriate rubrics in their questionnaire. As far as attitude to religion was concerned, 100% of persons with completed and incompleting primary education answered "I am a Christian" in comparison with 85% of persons with education above secondary, i.e. similarly to the total population. 20% of the respondents "had some contacts with non-professional medicine before (quack doctor, herbalist, homeopathist, others—for example Harris)". It turned out that neither the kind of illness nor education had any influence on the response. It is interesting that similar data were obtained in the representative all-Polish survey: namely, 15% persons responded affirmatively.\* More than half of the respondents answered that "they believed to a high degree in the efficiency of Harris's healing activity". This result is also similar to that obtained in the above mentioned all-Polish research: from among the persons who already consulted a non-physician, 60% considered their advice efficient.

Harris's patients may be divided into 3 groups:

1. Severely or incurably ill—the largest group; 2. Persons who for various reasons do not agree to the long-lasting treatment recommended by a physician and they want to try a chance of the immediate recovery (in some cases this group equals the previous one); 3. A small group of persons who suffer nothing or nearly nothing and who came "just in case" as "it will not do any harm".

Why do people come to Harris so eagerly? It is my opinion that mainly it reflects a general value prevailing in modern societies: the overpowering desire to live, reluctance to suffering and dying. Even the phase of advanced cancer does not cause thinking about death but rather about its avoidance. Death is regarded almost as a technical error. If any belief in miracles can be considered, it means rather belief in the miracles of contemporary scientific medicine. It created the conviction that all diseases are curable thanks to the use of a proper pharmacologic, surgical or another treatment. When it turns out that such treatment does not exist, people go for it to Harris. It is an absolutely rational behavior, laic ideology, an attempt to try every possibility of curing. It is an entirely "technical" attitude even when assumed that the treatment itself is non-technical. Nevertheless, whichever treatment it is, it must be efficient since it appeals to more and more people. Harris has been to Poland few times and if he did not help people, his popularity would decrease despite all attractive circumstances.

Harris's success does not have to mean distrust or unwillingness to the scientific medicine and health service. Though the "phenomenon of Harris" uncovers the enormity of unprovided needs, still, this was not the patients' purpose. I think that the "dehumanisation" of medicine is wrongly regarded as the main reason for Harris's popularity by some journalists, social scientists and medical doctors in Poland. Though it sounds very impressive, a non-medical healer touches a patient with a human warm gesture already forgotten by impersonal, cold medicine. In reality however, this quick touch in the conditions described above has nothing to do with the desired model of patient-physician relation. It rather recalls a purely technical procedure, as for example injection.

The medical doctors' attitude is ambivalent as a whole and the variety of reactions is striking. (Several years ago, such attitude would be much more uniform: mainly negative.) At least 3 main types of reactions may be distinguished:

1. Doctors openly hostile. (This is also an official attitude of medical establishment.) They categorically reject the idea of any "dialogue" with Harris and any acceptance of his practice. They consider him as the quack who does not differ from other "healers" over-running Poland and "curing" by charming away illness, examining urine, reading eyes, etc. They think that Harris's activity is harmful because under his influence (though not intended), patients may give up proper treatment, i.e. deprive themselves of the chance of curing. The notion is being spread that medical doctors are not permitted to have any contact with "such people". Apparently doctors received a special warning on this question in relation to Harris.

2. Doctors characterized by a scientific curiosity and an open attitude. They initiated or wanted to initiate research, clinical or socio-epidemiological, to define whether Harris possesses any specific features detectable by the methods known to medicine and whether it is possible to notice any significant improvement of the physical health of his patients.

3. A small group of physicians, particularly young ones, took active part in the organization of the meetings as "private" persons. Among others, they were on emergency duty during the meetings, which was necessary as the crowds of several thousand waiting for Harris consisted mainly of ill, or even severely ill people. Some of them were on stretchers. (Ambulances and other cars arrived with severely ill patients.)

Probably the most frequent opinion heard in informal talks with the doctors is that people chronically or severely ill and particularly those incurably ill, could not be forbidden to use the additional chance even if the physician does not believe in it, does not know it or does not understand it. Therefore several doctors willingly or unwillingly gave medical certificates allowing people to get to see Harris. Some of them simply officially supported this visit to Harris, for example they allowed individual patients or even whole groups of them (of patients suffering cancer) to leave hospital; few of them provided transportation.

Also relatively often doctors admitted privately that there is nothing to wonder at because of several

\* First research of this kind was conducted in Poland in 1976 by Antonina Ostrowska for the Center for Public Opinion Research of Polish Radio and TV. The following question was included in the questionnaire: "Have you ever for yourself or for your close relative consulted on health matters a person not connected with the health service but regarded to have an ability or 'force' of healing?" Only slight difference in the respondents' education are noticed here (15.7% among farmers, 12.3% among intelligentsia).

difficulties related to the availability of medical specialist, laboratory findings, hospital admission, etc. at the present time. Along with the development of health services, public demands are increasing dramatically, since people realize that there exist in the country adequate centers, specialists, equipment, etc. However, if a sick individual is not able to reach them easily, knowing that his/her illness requires prompt cure and care, he has no choice but Harris, even if he would prefer to be treated by good specialists and to be hospitalized.

Several doctors and journalists are inclined to think that the popularity surrounding Harris is the response to a well-known weakness of contemporary medicine and the health system: lack of a personal relation between patient and physician. It is referred here to a psychotherapeutic and "Samaritan" role neglected by the doctor. In relation to it, a need for a strong primary care was expressed (as usual on occasions like this).

A few words about the reaction of the sociologists who attended the above-mentioned meeting of the Polish Sociological Association, Warsaw branch, under the title "Sociological interpretation of Harris's phenomenon." There were about 160 people present in comparison with about 30 at most of such meetings. Many could not get in because of lack of space in the room. It has been noticed that several friends of our members and friends of the friends were also present, as well as journalists who managed somehow to get in. The majority of the audience was mostly interested in discussing some features of this particular mass behavior, especially its well organized spontaneity, the role played by the informal groups and by the church. As to Harris, the general attitude was clearly permissive and supportive of his role as an agent stimulating spontaneous public response. There were some typical critical remarks on contemporary medicine generally (belief in "pure reason," placebo, methods used for centuries, reserved right to perform miracles, obscure way of admission of hypnosis, etc. as a proper scientific technique) and on health service in Poland particularly. However, assuming that scientific medicine saves life in even 90% of patients, the remaining 10% will look for other healers who offer a flicker of hope in their hopeless situation. Who of us would not be tempted to try the last resort when his close relative would have to die of an incurable disease? Who would not like to believe that there is still something to be done? Since some doctors and journalists on the panel accused Harris of increasing irrational behavior, group hysteria, belief in miracles, prayers, U.F.O., flying saucers, the atmosphere of the meeting became very stormy indeed.

MAGDALENA SOKOŁOWSKA



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## THE DISCOURSE ON STRESS AND THE REPRODUCTION OF CONVENTIONAL KNOWLEDGE

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**Abstract**—Stress researchers produce evidence that certain historically particular beliefs about the social order actually describe a universal reality. The theories and social relations which produce this evidence are also responsible for the way in which the scholarly discourse on stress has developed: its search for context-free knowledge, its failure to critically analyze the role of cognition in pathogenesis, and its capacity for de-socializing the social determinants of sickness and people's perceptions of sickness. To make these points, I adopt a framework emphasizing (1) the importance of utility and context to knowledge producers, particularly the researchers' informants, and (2) the social determinants of scientific knowledge.

This paper is about the relation between people's beliefs about stress and their beliefs about the nature and legitimacy of the social order.

I became interested in the ideological content of beliefs about stress for a combination of reasons. First, if one is to judge by the large volume of relevant scholarly literature that has appeared over the last few decades, stress is a subject which attracts the attention of many behavioral and social scientists. What struck me as interesting in this regard is the degree to which the techniques and arguments of many stress researchers parallel certain forms of medical divination I had studied in Ethiopia and which are widely distributed among traditional societies [1]. To be more specific, I was impressed by the way in which both make use of analogy and ellipsis in order to link together what would otherwise seem to be disparate sets of events (e.g. building a house and falling ill, according to some stress writers).

Second, during this relatively short period, "stress" and ancillary concepts such as "coping" have permeated everyday discourse. For example, the 1949 edition of the Merriam Webster *Collegiate Dictionary* defines stress briefly and non-anthropocentrically as the "action of external forces; especially to overstrain". Sixteen years later, the entry is amended to include "a physical, chemical or emotional state that causes bodily or mental tension and may be a factor in disease causation..." and a state of "bodily or mental tension resulting from factors that tend to alter an existent equilibrium". To this instance, one can add that information on stress is now widely available to lay audiences (and one supposes it is also widely consumed by them) through frequent articles in mass circulation magazines, self-help books, television programs, lectures, and pharmaceutical advertising for vitamins and sleep preparations.

Third, social and behavioral scientists writing about stress claim that their explanations, unlike purely "biomedical" analyses, take account of social factors affecting people's vulnerability to sickness. What seemed particularly interesting to me, however, is that it is precisely through its use of ostensibly sociological information that the stress discourse effectively subverts sociological reasoning. By displacing the human subject from his place in society to a

desocialized and amorphous environment, the discourse banishes the arena of conflicting class and group interests from the real conditions of existence. In its place, the discourse substitutes a *zone of anxiety* within which the power to affect people's well-being is diffuse and subjective (hence the emphasis on "psychosocial supports", "coping mechanisms", "stressful life events"), and "change" is constituted as a pathogenic environment-out-of-control.

After a selective review of the social and behavioral science literature on stress, I concluded that this combination of circumstances is not fortuitous, but reflects a congruence between the ideological content of the stress literature and what I conjecture are the beliefs most middle class Americans hold about man's social nature. It is this ideological quality which inclines many readers to feel that the stress argument is intuitively correct.

Before going any further, I want to make explicit the special sense in which I use "ideology" throughout this paper. By "ideology" I mean the tacit beliefs through which a person represents to himself (a) himself as a human subject, i.e. a more or less integral and temporally continuous locus of perceptions, initiatives, and responsibility, (b) other people as subjects, (c) collective social subjects (groups, families, etc.), and (d) social relationships between and among these subjects. Ideological beliefs are represented in such a way that they are felt to be commonsensical, merely mirroring the real conditions of existence (i.e. they describe without distorting). Such ideologies are, then, distinguished from *formal* ideologies, which are clearly articulated sets of principled beliefs about society and, in certain circumstances, can be recognized by the people who hold them as inconsistent with their lived experiences [2].

As I shall make clear later, to assert an ideological content for the stress literature is not equivalent to asserting that it is unscholarly or unscientific, however. My thesis in this paper is that while the facts about stress *are* scientific, they are also the products of certain historically determined factors—i.e. specific sets of social relations and theoretical knowledge—which account for their ideological character. The social relations used to produce facts about stress reflect the social division of labor which characterizes

the general mode of commodity production; the theoretical knowledge used to produce these facts is organized around an ahistorical understanding of society. The point is not simply that these facts are socially constructed, since this claim can be made to a degree about any set of facts, but that they are constructed in ways which produce only conventional meanings, i.e. ones resonant with the dominant ideology.

These historically determined factors of production are also reflected in the unusual development of the stress discourse. The discourse's distinctiveness lies in its attempt to connect pathogenic events to pathological outcomes by the ways that people perceive and appraise these events. This sets off stress research from other approaches to disease etiology and epidemiology. Yet, after several decades of stress research, this distinctive assumption about cognition remains abstract and analytically undeveloped. Theoretical attention and research efforts have been characteristically spent on codifying and measuring other conditions, such as stressful life events and coping mechanisms, whose role in explaining the epidemiology of stress depends on our prior understanding of how people perceive and appraise them.

This paper is organized in two parts. The first describes in a general way the theoretical knowledge and social relations needed to produce the literature on stress. The second part illustrates my thesis by analyzing representative examples of stress research, i.e. studies covering the major theoretical and methodological issues of behavioural and social science stress research and authored by prominent and respected researchers.

#### THE ROLE OF COGNITION IN THE STRESS PROCESS

Generally speaking, "stress" is used in the social and behavioral science literature to denote circumstances where certain events external to an individual lead to, or have the potential for leading to, pathological consequences for him. At a less abstract level, however, the term is used in at least four different senses.

Sometimes, "stress" is used to denote stressful circumstances (e.g. "the stress of urban life"). This is the least distinctive use of the term, since it is usually unclear whether or not "stress" is being used to designate a particular category of external threats.

A second use of the term is idiosyncratic, in the sense that the author writes about stress in a way that is substantially different from other writers' notions of the term. A. F. C. Wallace [3], for example, uses "stress" to denote circumstances leading to a "mazeway resynthesis" where, after an extended period of cognitive dissonance and metabolic disturbance, some violent physical stimulus precipitates a permanent re-sorting of the individual's cognitive map.

In this paper I am concerned only with the following two meanings of "stress".

In the third sense of the term, "stress" is used to distinguish situations in which the organism cannot separate itself from noxious or threatening circumstances and a particular series of neuro-

endocrinological and patho-physiological events occurs or can occur. According to some writers, a non-specific hormonal response occurs via increased pituitary-adrenal cortical activity [4, 5], while according to others particular multi-hormonal patterns are evoked [6]. In either event, the prolonged hormonal activity which results leads to disequilibrating and maladaptive consequences.

Finally, "stress" is also used by social and behavioral scientists to describe an input-output process consisting of observable stressful events, observable symptomatic outcomes (or the potential for such outcomes) and processes, internal to the individual and generally observed only indirectly, which connect stressful events to symptoms. Most of the stress literature by sociologists and social psychologists contains no clear statement of the intrapsychic or intrasomatic processes that are being identified with stress. However, it can be assumed that these writers predicate their research and analysis on the input-output process described in the preceding paragraph—either directly or, especially if they concentrate on mental illness outcomes, by analogy [7, p. 132; 8, p. 108; 9, p. 4]. Where it is incorrect to make this assumption, we can suppose that the writer is using "stress" in the first sense, in which case the term is being used only euphemistically, or in the second sense, in which case he must give us more information before we can interpret and evaluate his work.

The stress processes about which social and behavioral scientists write also incorporate important cognitive determinants. In a recent exchange of views between Selye and Mason, leading researchers into the physiological components of stress, Mason refers to a growing body of research indicating that stressors (i.e. exogenous inputs stimulating hormonal activity) are generally associated with conditions which elicit emotional arousal. Selye rejects Mason's position and proposes that the term "psychogenic stress" be reserved for distinguishing instances involving emotional arousal. But his counter-instances (stress in animals with rudimentary nervous systems, stress in anaesthetized people) lie outside social and behavioral science's fields of observation [10-12]. Thus, it seems safe to identify the instances of stress discussed by sociologists and social psychologists with psychogenic stress. This is the sense in which "stress" will be used from this point on.

Does this necessarily imply an important role for cognitive determinants, though? Lazarus, an important and representative writer on stress, has given attention to this question. Emotional arousal, he writes, occurs because an individual is *aware* of stressful stimuli and he *appraises* them as threatening, meaning he *anticipates* harm, or-challenging, meaning he *perceives* his usual mode of being may be insufficient and the consequences of not adapting are serious [13, pp. 340-1; 14, pp. 553-61; 15, p. 13]. Although Lazarus concludes that stress does involve cognitive determinants, he cautions against assuming that appraisal necessarily means full awareness, since awareness is "somewhat tied to verbal expression" and "will vary with how adequate verbal expression is in labeling the relevant processes and conditions" [16, p. 81]. This is an important reservation since, in some instances, the individual is unable to label pro-

cesses and conditions because they are subtle and escape his critical attention. While the quality of the individual's emotional arousal (anxiety, fear, anger, depression, guilt, or shame, according to Lazarus) is determined by how he appraises his present situation, the appraisal process is affected in complex ways by how he perceives the locus of control of the events that are happening to him, the meaning of relevant past events, and the consequences of his adaptive responses. His appraisals of threats are also affected by his "special personality attributes," that can be distinguished from cognitive processes [17, p. 1014; 18, p. 136; 19, p. 103; 20, pp. 341-2].

#### THE PROBLEMATIC OF KNOWLEDGE

Social scientists have long been interested in uncovering the relation between a group's beliefs about their social relations and their actual, lived relations. The interest has produced no consensus, of course, not even within particular social science disciplines. This is not the place to compare the different approaches to this issue and I shall simply describe the framework within which I want to explain these beliefs.

1. Complex and socially important beliefs are products of different kinds and levels of determinants. When I say, for example, that the literature on stress determines a particular conception of man's social nature, I mean that it contributes to communicating and confirming this notion for some group or class of people. Obviously there are many other determinants, such as other examples of the social science literature, imaginative literature, socialization processes, and legal institutions. By "levels" of determinants I mean to call attention to political and economic arrangements which make it possible to produce particular kinds of knowledge and determine who will have access to the knowledge which is produced. (See 7, below).

2. "Belief" does not denote an epistemologically uniform domain; there are different kinds of beliefs. This becomes clear if we look at beliefs in terms of how they are related to people's experience and be-

haviour, i.e. in terms of the *problematic of knowledge*. This problematic is outlined in Table 1. For expository reasons, the relation between belief and experience is treated as if it were a linear process, so that the figure is read from top to bottom, with feed-back looping to the top. In this scheme, beliefs are connected (directly or indirectly) to experience, either in a simple way, so that belief and experience contribute only to reproducing each other, or dialectically, so that they transform one another.

This problematic emphasizes the importance of *context and utility* to knowledge producers, and implies, for example, that "self-knowledge" elicited from informants by means of survey research techniques is problematically related to their rationalized knowledge of the events they have been asked to describe. ("Utility" is used here in a broad sense to include the production of knowledge which infuses circumstances with a particular set of meanings and, so, enables the individual to control the threats of cognitive dissonance and ontological insecurity.)

3. Stress research and literature reproduce beliefs about man's social nature. They constitute a vantage point from which it is possible for researchers, writers, and readers to identify and organize a constellation of social objects and events whose relatedness may not be apparent otherwise. At the same time, it leaves other objects and events unconnected and irrelevant to the individuals' discourse of knowledge. The vantage point is, then, an instrument for producing knowledge. Put into the vocabulary of Table 1, it is a form of theoretical knowledge that enables a person to produce certain facts or evidence by directing his actions, resources, and observations in particular directions. The individual's ability to produce these facts (whether through research or reading) is simultaneously his reasons for confidence in the principles and interpretive schemes which are his theoretical knowledge.

4. Interpretive schemes work (i.e. produce material knowledge) by comparing two sets of objects, events, and relations. Each interpretive scheme describes an original set, Set I, which is always at a distance from the set of objects, events, and relations it is used to

Table 1. How the individual produces his knowledge

<i>Cognition</i>	
Reflexive monitoring of the outcome of one's actions and other events.	
<i>Material knowledge</i>	<i>Theoretical knowledge</i>
Observations of objects and events in the material world, emphasizing agency, implication, control, and prediction; it is contingent knowledge because it is bound to particular times and events.	Organizes material knowledge by means of interpretative schemes people use to constitute and understand society and nature; it may be explicit or tacit; normative beliefs are a sub-set of theoretical knowledge.
<i>Rationalized knowledge of outcomes and other events</i>	
Constitutes events in ways which have meaning for the individual, emphasizing the coherence of observed events (e.g. biographical, trans-situational meanings).	
<i>Public knowledge</i>	
Constitutes objects and events in ways in which the individual intends to give them inter-subjective meaning.	
<i>Shared knowledge</i>	
The meanings of objects and events after they have been negotiated in interaction.	



produce, Set II. The sets are most commonly connected by either analogy or abstraction. Connections are by *analogy* when the two sets are believed to parallel one another in such a way that when people know how Set I is organized they can find the objects, events, and relations of Set II. (The use of the organic analogy in functionalist theory is an example.) Sets are connected by *abstraction* when the relations which organize Set I also organize Set II. (For example, the neuro-endocrinological theory of stress, positing a sequence of events ending with certain pathophysiological outcomes, is Set I for stress experiments which produce these characteristic outcomes in laboratory animals.) Set II is the same as Set I, all things being equal. Things are never entirely equal, of course; if they were, Set I would no longer interpret Set II but would be identical with it. The *ceteris paribus* clause means that there must be operations which will simplify Set II objects, events, and relations so that they are commensurable with Set I. (For example, only the *salient* noxious stimulus affecting experimental animals is measured.)

When sets are related by abstraction, Set I is an authority in the sense that its credibility affects the credibility of Set II. When sets are related by analogy, Set I cannot guarantee the validity of the material knowledge that it helped to produce. (For example, developments in physiological research are irrelevant to the credibility of functionalist beliefs about social homeostasis.) Where the relation between analogical sets is not clearly demarcated (so that relations by abstraction are at least plausible), people often treat Set I as an authority for Set II [21]. Later in this paper I argue that although sociological and endocrinological discourses on stress are related by analogy, many sociologists operate as if the endocrinological discourse were an authority for their stress research.

5. Much of the theoretical knowledge of the stress discourse is *tacit knowledge*. That is, these beliefs appear to the people who use them (for organizing research, writing, reading) to merely reflect "empirically observed" facts of nature, and not—as I contend they are—socially determined instruments for producing certain orders of facts. Tacit beliefs are taken for granted, commonsensical, and admitted without argument; they attract no epistemological scrutiny and receive no formal codification [22, pp. 169–70]. One of my main points in this paper is that the discourse on stress depends on tacit knowledge of the "abstract individual." This is its vantage point for producing facts about man's social nature.

6. Theoretical knowledge cuts two ways. It affirms knowledge, by making objects and events appear and experiences happen. It also denies knowledge, by making certain observations unlikely to occur. Theorized facts appear as concepts, untheorized ones as percepts. In the stress discourse, for example, facts relating to the social forces and processes which reproduce the environmental determinants of sickness appear as percepts, in the sense of being fragmented into the attributes of individuals (e.g. status dimensions).

This denial of knowledge is a discourse's *specificity*. Specificity is intrinsic to every discourse, since it creates the epistemological space which makes dis-

course possible in the first place. It is not eliminated by adding intervening variables or merging disciplinary traditions. We shall see in the next section that the adoption of a social-psychological-biomedical approach does not reduce the specificity of the stress discourse. Through this linkage the authority of biomedicine—which makes the somatized facts of the stress discourse possible—only "naturalizes" the theoretical knowledge of empiricist sociology. That is, it gives this theoretical knowledge the appearance of simply reflecting facts of nature. In this way, the merging of disciplines deepens the discourse's specificity, in the sense of further inhibiting people's critical awareness of the historical determinants of their theoretical knowledge.

7. Knowledge is generally a social rather than an individual product. When, in the following sections, I write about the stress discourse, the stress literature, and people's knowledge of stress, I am referring to two processes: (1) the collective work of stress researchers, their informants, etc. and (2) the work of each reader, who examines the researcher's printed statements and uses them as theoretical knowledge in his everyday affairs.

Because knowledge is a social product, it is useful to speak about different *labor processes of producing knowledge*. Each process consists of particular combinations of technoenvironmental elements and social relations of production. The role of the natural environment in producing knowledge is to provide producers with objects and events to observe, and with the material resources which make observers and the technology of observation possible. Even in the case of scientific knowledge, environmental elements are "natural" in a relative sense only. They are always partly determined by technology, as, for example, when behavioural and biomedical phenomena are produced experimentally, clinically, or statistically and then captured by trained observers. The most important instance of technology transforming the objects and events of nature is language.

Social relations of production are constituted by (1) the technical organization of the labor process into unit tasks and their distribution among the various producers into relations of command (e.g. researcher: subject), competition (e.g. researcher:researcher), and cooperation and dependence (e.g. researcher:editor); (2) the distribution and access to the material means of production (e.g. laboratory equipment, printing presses) and conditions of production (i.e. necessary skills and knowledge, access to observations and outcomes, attributions of legitimacy); and (3) the distribution and appropriation of the product of the collective labor (i.e. knowledge) [23, 24].

#### CONVENTIONAL KNOWLEDGE OF SOCIETY

My thesis is that the theoretical knowledge and social relations that produce facts about stress simultaneously produce evidence that conventional (Western) beliefs about the social order are accurate descriptions of the universal social condition of humankind. I identify conventional beliefs with the "empiricist" tradition in sociology and the middle-class world view. [For recent discussions on this subject, see 25, pp. 1–20; 26, Chap. 1; 27, pp. 245–48; 28,

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pp. 33-4; 29, Chap. 4; 30, Chap. 17; 31, pp. 37, 79-80; 32, Part 2.]

1. The *empiricist understanding* of social relations rests on two propositions. First, scientific knowledge of social behavior is possible because we possess a more or less value free language of observation and description, and certain rigorous methods for analyzing the data that we collect. This means that questions of truth can be separated from questions of value. (There are exceptions, e.g. the researcher's decision to study one topic rather than some other is a value judgement, but they are at a very high level of abstraction.) For these reasons, it can be assumed that what we recognize as the external and objective character of social reality is what is actually happening.

Second, the methodology of the natural sciences is appropriate to the social sciences and guarantees an ontological advantage for the facts it discovers and the theories these support. If a particular explanation can be shown to account for the facts in an objective and scientific manner, rival explanations must be either re-interpreted or discarded. Put into other words, in order for different explanations of the same facts to be equally scientific, they must also be complementary in the sense that they have a common (i.e. empiricist) epistemology

2. The empiricist understanding gives us access to the basic unit of society. This is the *individual*. He is conceived as the bearer of fixed psychological dispositions which explain his interests, wants, needs, and purposes, and make it possible to identify his actions with his completed act and his statements with his thoughts and beliefs. Here, intention is regarded as an event coupled to a specific act, not (as I shall contend it is) a recursive process. Thus, the nature of human subjectivity and volition raises no special obstacles in the way of treating his behavior as an object similar to the objects of the physical world. For this reason, behavior elicited from people in experimental settings can constitute facts on a par with the behavior of individuals in social settings.

3. The individual's social self is characterized by a high degree of *voluntarism*, in the sense that his acts are explained mainly in terms of their intrapsychic determinants. This is realized in research and writing in terms of roles, personae, and life-styles—that is, instruments by means of which the individual interacts and collaborates with other individuals in the orderly way necessary for gaining important material and existential ends. Our knowledge of the social reality that exists beyond the boundaries of the individual is learned mainly by studying dyadic relations between individuals, configurations of dyads, or aggregates of individuals arrayed according to their particular attributes (e.g. the several dimensions of social status).

4. Society is an epiphenomenon of the dispositions, beliefs, decisions, and actions of the sum of individuals who "belong" to it. It is a set of actual or possible social arrangements responding to the independently given objectives and requirements of individuals. Social institutions and large scale social phenomena are either "emergent structures" arising out of the wants, decisions, and behavior of interacting individuals; idealist representations constituted by

internalized values; or simply deferred to another, "macro-sociological", level of analysis [33].

Now it is time for my comments. By labeling these four propositions "conventional knowledge" I mean that people regard them as self-evident, as only formalizing what is already known through "facts". In one sense they are correct, since the conventional knowledge is an instrument which enables people to produce convincing evidence for their beliefs. But my argument in the previous section makes it clear that there are at least two reasons for *rejecting* these propositions.

First, the propositions are limited to a single level of determinants. They concentrate on empirically observed interaction and organize these observations around the rationality and volition of the individual actor. In effect, they direct us to ask why under such-and-such conditions does an actor choose a course of action *X* rather than *Y* or *Z*. In this way, by ignoring the social forces embedded in the political economy, the propositions lead away from questions about why this person has only these choices, how and why his knowledge of his options is different from other people's knowledge of them, and how his choices contribute to reproducing these particular circumstances.

Second, the propositions are self-evident only if we misunderstand how scientific as well as non-scientific knowledge about society is produced. This knowledge is historically determined and never logically necessary except at the most abstract level (where, e.g. it is possible to speak about social life having certain "functional prerequisites"). I conclude from this that the appropriate interests of the social scientist are (1) the beliefs and behavior of historical persons and not abstract individuals and (2) a self-critical awareness of the historical and political-economic determinants of *his own knowledge* of society.

The empiricist misses this last point because he (correctly) identifies his work with science but misunderstands the nature of scientific knowledge and its production. Science is distinctive because its doctrine excludes the possibility of non-human anthropomorphized agency, and its mode of producing knowledge is characterized by unique social relations: observations and statements are pooled and exposed within each professional community (e.g. replicable "findings" circulate in professional journals) and, within certain externally imposed limits (e.g. funding priorities set by the State), uniform and abstract standards (e.g. the standards of falsifiable hypotheses and replicable findings) are intended to displace the exigencies of particular people or groups.

The superiority of scientific knowledge is that it gives advantages of prediction and control. It is unnecessary to suppose that scientific knowledge guarantees an ontological advantage to its users, however. This point argues *against* assuming that: (1) science works by uncovering facts that already exist (i.e. that observable facts exist before they are transformed by language) and producing knowledge that is not predetermined by circumstances lying outside the facts it wants to understand; (2) the specificity of discourse (the difference between what it and other discourses can see, say, and provide by way of experience) is a weakness in analytical design and can be

corrected by adding mediating factors or merging disciplinary traditions; or (3) in order for different explanations of the same facts to be equally scientific they must be complementary in the sense of having a common, empiricist, epistemology [34-38].

#### THE PRODUCTION OF KNOWLEDGE OF STRESS

The stress discourse is distinctive because it attempts to connect pathogenic events to pathological outcomes by means of victims' perceptions of these events. The researcher's access to these perceptions is mainly through what his informants tell him. The meaning that a researcher attributes to his informants' statements depends on the form in which the statements have been elicited and the interpretive schemes he uses to decode them. A researcher never simply "collects" his informants' perceptions. Rather, he produces knowledge about them by means of a particular technology and social relations of production.

In the stress discourse, informants' statements are produced by means of (1) a set of social relations that are similar to the relations of the general process of commodity production, and (2) an instrument which the stress discourse shares with other conventional understandings of society (i.e. theoretical knowledge of the abstract individual). These arrangements enable stress researchers to account for people's perceptions and evaluations of stressful events; they make the stress discourse possible. My point is that they do it in a way that leaves the meaning and structure of informants' perceptions and evaluations both abstract and uncertain.

In order to produce his facts about the perception of stressful events, the stress researcher requires his informants to produce statements in the form of categorical evaluations. He proposes, for example, that all instances of event *X* have meaning *Y* for individuals with status attributes *Z*. Thus, if he observes that individuals *Z* have checked questionnaire entry *X*, he knows that they perceive event *X* in way *Y*. The researcher's evidence for the association *X/Y/Z* is characteristically produced by (1) procedures in which a consensus of judges or statistical proofs predetermines the meaning statements will have for particular categories of informants, and (2) statistical operations which demonstrate that these inputs (decoded statements) are correlated with the predicted outcomes (e.g. sickness).

But what do analysts do when they are unable to produce predicted statistical associations between inputs and outcomes, when the facts of (1) are inconsistent with the evidence of (2)? Their answers are important because they indicate which variables will be developed through theory and analysis. (A concept develops in science through its dialectical relationship with the observations it is used to produce.) Stress workers rely on three solutions: They introduce additional variables, so that in order for *X/Y/Z* to occur, conditions *W* must also be met. They reconceptualize the categories of stressful events to which their informants are asked to respond. (So, for example, they reconstruct *X* or *Y* in order to make it less culture-

bound.) They refine their samples; for example, they add new status dimensions to *Z*.

These three arrangements enable researchers to account for the role of cognition without re-examining or further developing their assumptions about it. The remaining three sections illustrate my thesis with respective examples of stress research. This section uses David Glass's research on coronary prone behavior to identify the labor process which produces knowledge of stress. The point is made that this labor process is an instance of a more general process of commodity production. The next section uses research on stressful life events to describe how the statements that are elicited from informants during this labor process are transformed into "objective" knowledge—that is, knowledge whose meaning is independent of particular contexts. The final section is mainly concerned with three studies by Leonard Pearlin and his colleagues, and indicates how the objectification of knowledge about stress distorts the understanding of social processes and forces in a way that reproduces conventional ideas about the decomposability of society.

Glass's monograph [39] describes a series of experiments in which he compared two aggregates of university students. These people were given a self-administered questionnaire and a person was identified as "Type A" if his everyday goal directed behavior was characterized by competitive achievement striving, exaggerated sense of time urgency, aggressiveness and hostility. (A sample question: "Do you ever set deadlines or quotas for yourself in courses or other things?") A person whose statements indicated that he does not behave this way was labelled "Type B". Descriptions of Type A and Type B individuals represent a bipolar continuum. No one Type A individual is expected to manifest all of the characteristics constituting this pattern, and informants were classified A or B according to where they scored relative to a median.

Each stress experiment is in two phases. The first is called "pre-treatment" and requires the informant to perform tasks through which the experimenter intends to operationalize the informant's experience of loss of control over his environment (a stressful experience for Type As). For example, he is told to complete puzzle-tasks which are, unknown to him, unsolvable. In the second phase, he is required to perform "challenging" puzzle-tasks which are difficult but solvable. Among Glass's findings are these:

1. His statistical evidence indicates that each aggregate behaves in a distinctive way during the experiments. When stressful circumstances of phase one are salient (i.e. they attract the individual's attention) and of short duration, Type A individuals are hyper-responsive in phase two relative to Type Bs. For example, they react to puzzle-tasks more rapidly and put more effort into performing them. Where stressors are salient and prolonged, Type A people are hypo-responsive. "Using an explicit learned-helplessness paradigm, [Glass concludes that] Type As exhibited greater evidence of giving up (relative to Type Bs) when they became convinced that a salient stressor was in fact uncontrollable."

2. Individuals were asked to report their appraisals of their experiences by means of a post-experiment



questionnaire. For example, after an anagram solving experiment (phase two), informants were asked to indicate the extent to which they believed (a) they could not have solved the problems, and (b) the problems were unsolvable; they were also asked to indicate the degree of their helplessness on a seven point scale. Glass writes about "repeatedly failing to detect differences in the ways Type As and Type Bs perceived experimental situations. Aside from occasional differences in felt frustration, all subjects tended to describe the procedures in much the same way irrespective of their position on the A-B continuum" [40, pp. 123, 165-7].

Glass makes clear that this is a puzzle. Although Type A individuals responded to stressful circumstances (threats to their sense of control) in a distinctive way, they did not report perceiving the circumstances in a distinctive way. There are several ways in which Glass could have approached this puzzle. One way is to begin with questions about the *meaning* of his informants' statements. For example, when we look at Glass's facts in terms of the problematic of knowledge (see Table 1), it is by no means clear what his informants' statements mean or what Glass expected to learn from the facts he helped to produce.

More specifically, (1) We are uncertain what form of knowledge the pre- and post-experiment statements constitute, even though these forms are often significantly different from one another. Is it material knowledge (the informant's initial construction of events), or a rationalized outcome (he gives his knowledge a particular trans-situational meaning), or shared knowledge (e.g. the instruments used to elicit his statements produce knowledge strongly shaped by Glass's expectations)? Nor do we know which form of knowledge is believed to determine emotional arousal and hormonal stimulation. (Glass argues that, everything else being equal, Type A people experience more stress than Type Bs and, as a consequence, they suffer a higher incidence of coronary heart disease [41, Chap. 10 and 12]). (2) Even if we were to assume that the informants' reports are valid (i.e. that Types A and B individuals "really" perceived events in the same way), their meaning is still unclear. Because the Type A-B hypothesis reflects the abstract individual's single dimension, utility-volition, it describes only means to ends behavior. Type A behavior is described as "a characteristic action-emotion complex which is exhibited by those individuals who are engaged in a relatively *chronic struggle* to obtain an *unlimited number of poorly defined things* from their environment in the *shortest period of time* and, if necessary, against the opposing effects of other things or persons in the same environment" [42, p. 84]. Put into other words, Type A behavior is determined by a kind of maximax strategy, according to which the individual strives for maximum rewards even at the cost of maximum expenditures [43]. But this proposition says nothing concrete about people's hierarchies of ends. It seems unreasonable to assume that Type A individuals maximax *all* tasks, that they take everything equally seriously and that, for example, none of them are slovenly housekeepers. At first glance, one might suppose that the notion of "salience" can solve this problem. For example, one might propose that Type A individuals behave in a characteristically Type A

way only when circumstances compel or attract their attention, that is have high salience. Introducing the notion of salience only begs the question, however. In the experiments, "salience" is used in connection with very simple stimuli, such as loud noise, employed during phase one. The concept is useless for identifying the socially and culturally determined motivational hierarchies employed outside the experimental setting, however. It does not even adequately account for the events occurring during phase two, where instead of receiving substantive information about the specific hierarchies used by each of his informants, we have only Glass's casual reference to "sociocultural values". Yet if Type A individuals maximax their behavior according to a hierarchy of goals but there is no information about these goals, why are we obliged to believe that the informants found all their experimental tasks important enough to elicit responses [44]?

My point is not that Glass does not ask these questions. Rather, it is that he approaches the puzzle in a way that obviates any need for even raising them when he concludes that the "differential responsiveness of As and Bs to short- and long-term salient uncontrollable stress... [can be] treated as a style of response rather than the result of perceptual effects" (emphasis in the original). In other words, the notion of a "response style" makes it possible to explain why Type A individuals react to particular stimuli in a particular way without being fully aware (in Lazarus's sense) of the stimuli. Glass writes about a "prepotent set of responses in the individual's response hierarchy... elicited by stressful stimuli signifying lack of control." The prepotent response style is psychosocio-biologically determined. Certain individuals are genetically predisposed to Type A characteristics but whether or not these will develop depends on "a concatenation of events, including parental shaping, sociocultural values transmitted by societal institutions such as the school, peer pressure, and related factors" [45, pp. 122-4, 165-8].

Glass's solution is, then, to expand the interpretive (stress) scheme to include two levels of intervening variables, i.e. predispositions which determine the individual's behavior, and heterogeneous and vaguely identified circumstances which affect the predispositions. If readers find his solution convincing, it is because of the tacit knowledge they share with Glass. Once we reject tacit knowledge of the abstract individual, however, Glass's appeal to special personality attributes emerges as an essentialist argument in which causes (prepotent response style) merely repeat the meaning of their ostensible consequences (Type A behavior). It is an argument which says, in effect, "It is the nature of Type A people to produce Type A behavior".

Given the factors of production responsible for knowledge of stress, Glass's solution is no surprise. My guess is that when he asked his informants about their perceptions and appraisals, Glass wanted their rationalized knowledge of their experiences. Because these are the individual's most enduring knowledge of stressful events, we would expect rationalized knowledge to be the cause of the prolonged emotional arousal that characterizes the stress process. Rationalized knowledge is fully contextualized knowledge, however. It is the knowledge that psychoanalysts and



social anthropologists seek through their labor-intensive techniques, for example. But the social relations needed to produce the psychoanalyst's or anthropologist's knowledge are very different from the stress researcher's, since the latter's productive relations are an instance of the general commodity mode of production in Western society. To be more specific, the distinctiveness of the stress researcher's product depends on a set of relations with these characteristics: (1) People (subjects) are treated as the equal and free owners of a desirable commodity, their (self-) knowledge. They are believed to be equal because it is supposed that everyone possesses this knowledge; they are free because they are socially and psychologically unconstrained in the sense of being able to give away (communicate) this knowledge. (2) The social relations of production are organized by means of a hierarchy of command that divides the labor process into the project director's intellectual work—preparing, programming, and managing work—and his subjects' simple, fragmented, and standardized tasks. It is through this chain of command that the project director transmutes and objectifies (see next section) his informants' statements into his own "data" and, in the process, appropriates the product of their collective labor. It is this process of appropriation-transmutation which produces (only) the abstract and decontextualized facts that are the stress worker's data.

In summary, my point is that (1) it is reasonable for Glass and other stress researchers to organize the work process in these terms because of their tacit and conventional knowledge of man's place in society, and (2) the product of their work (knowledge of stress) in turn confirms this conventional knowledge—for themselves, their readers, and the readers and televiewers of their interpreters—by naturalizing it (locating it in nature rather than society or culture) and somatizing it (locating it in the individual rather than his social relations).

#### THE OBJECTIFICATION OF STRESSFUL EVENTS

The most distinctive methodology developed in connection with stress research is a class of techniques, originating in the work of Thomas Holmes, designed to measure stress inputs in terms of life changes. These techniques are predicated on the following assumptions: (1) Stress is a disease of adaptation. Stressful events are related to the individual's attempts to adjust himself to the changing demands of his physical and social environments. (2) There is a discernible relation between the amount of change imposed on an individual in the course of his everyday life and the extent to which he is exposed to stress processes. It is change *per se* which is significant and not the value which the individual places on it. (3) Therefore, stress inputs can be studied in terms of objective events requiring an individual to depart from his established patterns of behavior.

The instrument here is a standardized list of events. Each event is given a standardized weight, relating the amount of change, counted in "life change units", it can be expected to bring. Informants are asked to identify the events that happened to them over a

specified period. The researcher then adds up the informant's events and gives him a score representing his amount of stress input. Information about the informant's stress output (symptomatic outcomes) are obtained from medical records and self-reports and can be either retrospective or prospective.

The original list of life events was devised by Holmes and is known as the Schedule of Recent Experiences (SRE). This was subsequently refined by Holmes and Rahe [46] and renamed the Social Readjustment Rating Scale (SRRS). According to its authors, the SRRS lists 43 more or less common family, personal, occupational, and financial events (e.g. pregnancy, being fired from a job, marital separation) which can be expected to change the individual's "existing steady state" and evoke "efforts by the human organism that are faulty in kind and duration, [and] lower 'bodily resistance'..." The analytical importance of SRRS events is independent of their "psychological meaning, emotion, or social desirability." Some of the events are negative, but many are "consonant with the American values of achievement, success... [etc.]" [47, pp. 46-7, 50, 57-68]. Finally, the events are not intended to measure "on-going adjustments" or "long-standing life difficulties" such as chronic financial problems or "anticipated life stresses" such as imminent final exams [48 p. 527].

After testing the SRE and SRRS with large numbers of informants, Holmes and his colleagues conclude that the "clustering of social, or life, events achieves etiologic significance as a necessary, but not sufficient, cause of illness and accounts in part for the time of onset of disease" [49, p. 50]. Even so, Holmes' work has been criticized by several stress researchers [50-53; 54, p. 705; 55]. Among the most important critics are B. S. Dohrenwend and B. P. Dohrenwend, who have themselves conducted extensive research using stressful life event techniques. The Dohrenwends' main criticisms are that the SRRS entries were obtained from a skewed sample of informants and some of these events are socially or culturally specific (e.g. going on a vacation, building a house or having one built); in the case of some informants, certain entries are etiologically ambiguous in the sense of being both symptoms of outputs and markers of inputs (e.g. changes in eating or sleeping habits); Holmes and his associates do not describe their procedures for dealing with inflated ratings (i.e. inconsistent with their actual change-including potentials) that reflect the informant's psychological sensitivity to a particular entry (e.g. the death of a relative) [56, pp. 68-76; 57, p. 100; 58, pp. 229-30; 59, p. 208].

B. S. Dohrenwend, Krasnoff *et al.* [60] subsequently introduced the Psychiatric Epidemiology Research Interview (PERI) to overcome the limitations of the SRRS. Before I describe the special features of the PERI, I want to underline the importance that life event researchers associate with the *objective* meaning of their standardized lists.

In the life event literature, "objective" is used in a double sense. First, life events are intended to be objective markers of stressful changes and free from the psychological meaning informants give to them [61, p. 46]. Second, the etiological significance of a particular life event (the amount of change it brings) is designated by a weight that is determined by the

researcher, not the informant. The weight assigned to a life event is "a measure of social environmental stressors that is not confounded with individual predispositions and vulnerabilities, let alone with outcomes" [62, p. 206]. The weight appropriate to each life event is produced in the following way: (1) An initial list of everyday life events is collected by interviewing a sample of informants. In the case of the PERI, informants were asked "What was the last major event in your life that, for better or worse, interrupted or changed your usual activities?" If there was no response, the interviewer added "For example, events affecting your occupation, your physical health, living arrangements, your relations with your family members, your friends, or your personal values or beliefs". (2) A standardized list of events is picked from these responses. Then another sample of informants, called "judges," is asked to identify the amount of change entailed by each event. Usually, the judges are given a modulus event (e.g. marriage, rated at 500 life change units) as a point of reference. (3) Statistical techniques are used to convert the ratings given by the individual judges into a standardized weight for each event. (4) Other samples of informants are asked to indicate which life events happened to them during the period designated by the researcher (e.g. the last six months). Their responses are scored using the standardized weights produced by steps (2) and (3).

Although some researchers have suggested the usefulness of asking step (4) informants to designate the weights of their own life events [63] or describe the "contextual threat" of particular events [64], these "subjective" data have not been used in any large scale stress study. According to Dohrenwend, Krasnoff *et al.* [65, p. 206], the first innovation can give only "an individualized post hoc measure of change, [and] while it may be useful for understanding and treating individual cases, is not a clean measure of environmental input in a stress process." Likewise, the proposal to contextualize events "asks that we accept a certain mystification of measurement. So much is left to the interviewer and his training in this particular procedure that is not explicit or readily replicable by others" [66, p. 107].

The special advantage of the PERI is its ability to take account of social and cultural factors that affect the significance of certain life events for certain categories of people within the general population (unlike the SRRS). At the same time, it does not abandon the principle of objective life events (which subjectivist proposals would). More specifically, the PERI is different from the SRRS in the following ways: First, a list of 101 standardized events was picked from the nominations by step (1) informants. The entries were selected to include two classes of life events, i.e. "the universals of human experience" (e.g. marriage, birth, illness) and events which vary with social and cultural settings (e.g. building a house or having one built). Second, a stratified sample of step (2) informants (judges) was chosen. The sample reflects the major social distinctions within the specified population (New York City), i.e. ethnicity (black, Puerto Rican, non-Puerto Rican white), sex, class (upper, middle, lower, determined by the years of education of the head of the household). One-quarter of the original sample of judges was eliminated because their re-

sponses were unsatisfactory (e.g. their ratings were highly incomplete, they refused to accept the modulus event at 500 units, their ratings were rigid (too many 0s and 1000s)). Third, PERI techniques for standardizing weights, set (3), reflect the different responses groups of judges (grouped according to sex/ethnicity/class) give for particular events. For example, an important difference is the significantly higher ratings ("elevation") that some groups give to events. "To the extent that group differences in elevation represent rating bias, life-event weights in which the effect of elevation has been controlled [by a statistical technique] should provide better predictions than uncontrolled weights of the events on the relevant groups. On the one hand, to the extent that group differences in elevation represent true differences in experience, ratings that include the effect of elevation should provide better predictors" [67, pp. 206, 208, 209, 216, 218-24, 226-8].

Life event analyses (SRE, SRRS, PERI) are, then, predicated on the following sequence of events:

- I. Certain events ("stressful life events") produce change in the individual's everyday life.
- II. These changes, which include the individual's maladaptive responses, constitute exogenous, potentially stressful circumstances.
- III. The circumstances become stressful after the individual becomes aware of them. His awareness leads to emotional arousal.
- IV. Emotional arousal is the proximate cause of a physiological or psychological response which may lead to syndromal effects.

This sequence returns us to the question with which we began this paper: Why has the stress literature developed in its characteristic way? Put into other words, why does the relation III  $\rightarrow$  IV retain a key place in the stress model when it plays an unimportant role in research and analysis?

Part of the answer is that the stress discourse's claim to uniqueness depends on this relation. Without it, there is nothing which unifies the discourse or distinguishes it from other enterprises in social epidemiology. For the sake of my argument, let us suppose that the stress researchers' other facts are all correct—i.e. instances of I lead to instances of II, and there is a statistically valid association between instances of I and IV [68]. In the absence of information about the relation III  $\rightarrow$  IV, these facts imply only that instances of stress constitute a collection of epidemiological observations. There is no reason to believe that the observations identify a single class of epidemiologies, however.

Another part of the answer is that life event analysis is incapable of producing convincing evidence about the relation III  $\rightarrow$  IV. Life event research depends on being able to associate inputs with outputs, but fails because it never makes clear what the inputs actually are. The criticisms by the Dohrenwends and their associates of the asocial and acultural premises of Holmes and his colleagues are precisely to the point, and were an impetus for coding social, cultural, and situational distinctions into the PERI. In spite of these differences, the PERI works no better than the SRE and SRRS, however. Like these other life event techniques, it depends on social relations of

production outlined in the section on Glass—people are treated as free and equal owners of a commodity (knowledge) which is appropriated through a production process organized into a hierarchy of command constituted by the researchers' intellectual work and their subjects' simple, fragmented, and standardized tasks—which obviate the problematic of knowledge and, so, preclude learning the meaning of even coded inputs.

Finally, the discourse on stress remains persuasive, in spite of the disparity between the place of III → IV in discourse and research, because of the writer's and reader's tacit knowledge of the abstract individual and shared empiricist assumptions.

The assumptions of life event analysis as a form of social epidemiology is reflected in the Dohrenwends' characterization of stressful life events as "objective events" and "clean measures of environmental inputs". The term "objective" has many meanings. The Dohrenwends intend it to identify discrete events which are undistorted by subjective interpretations and play an important epidemiological role; i.e. they are events which actually determine stress processes and sickness outcomes. In earlier sections we described how the stress researcher's empiricist enterprise depends on (i.e. is legitimized by) being able to produce data which are objective in this sense, and how his characteristic social relations of production provide the abstract and decontextualized data which he identifies as objective.

According to the problematic of knowledge, on the other hand, the stress researcher's claims are unsupported. The Dohrenwends demonstrate that SRRS and PERI life events are objective only in the sense of being shared knowledge. That is, the events are objective because of the significance that the researchers and their informants (judges) have agreed to give them. It may be an interesting fact that judges tend to give similar weights to a particular event—perhaps it says something about the distribution of certain socially important beliefs, for example—but there is no reason to suppose that it is an *epidemiologically* significant fact.

There are two reasons why stressful life events are objective in this restricted sense only. First, there is the point I have already made. Links between life events and stress processes have not been demonstrated in a convincing way [69]. Second, stress researchers have produced no evidence that each life event entry (e.g. being fired from a job) groups together a homogeneous congeries of events and does not uncritically mix kinds and levels of determinants of sickness and other sorts of misery in a way that *obscures the existence of hierarchies of determinants*. Thus, the Dohrenwends and their associates do not indicate reasons for concentrating on one set or level of social determinants of stress rather than others. Were we willing, for the moment, to believe that life events are determinants of stress, still we would not know why it is necessary or advantageous to begin an analysis with the stressful life events listed in the SRE, SRRS, and PERI. Why not start at some earlier point, e.g. the socio-economic determinants of being fired or changing one's eating habits? Why not some later point, e.g. the employment consequences of becoming pregnant?

#### THE DECOMPOSITION OF SOCIETY

It is the specificity of their discourse that explains why stress researchers are disinterested in justifying a sociological *terminus a quo* for their analyses. Earlier in the paper, I argued that a discourse's specificity (the difference between what it and other discourses can see, say, and provide by way of experience) is determined by the factors producing the discourse's facts, and that specificity is not a weakness in analytical design. The objectification of life events that transforms relations between people into discrete moments in the medical career of the individual illustrates the specificity of the stress discourse, and helps explain why social processes, and hierarchies of social determinants, are "invisible" to the stress researcher (i.e. beyond the bounds of his discourse). First, the stress researcher's theoretical knowledge of the abstract individual absorbs each sociological challenge as a new mediating variable (e.g. another "status attribute" to be added to ethnicity, years of education, sex, etc.), so long as these challenges are legitimate—i.e. they share an empiricist, and therefore scientific, epistemology with the researcher's interpretive schemes. In these terms the authors of the PERI point to the flexibility of their coding criteria and their continuing concern with selecting appropriate samples of judges, and correctly describe the current limitations of their instrument as "technical weaknesses" [70, p. 228]. Second, the social relations that are needed to produce knowledge of objective life events preclude the eventual materialization of these invisible issues. How, for example, do we go from depending on free and equal knowledge producers to the fact that their knowledge is a *patterned mystification* of their life situations?

The point that I am moving towards is that the factors that produce knowledge about stress also produce conventional knowledge of a wholly decomposable society. I use the term "decomposability" to call attention to a line beyond which the analysis of a society into its constituent elements (e.g. classes, institutions, interests) cannot continue without obscuring the processes which reproduce the society's characteristic structure—as in capitalist society, e.g. where processes constituting the mobility of labor and capital reproduce the characteristic structural contradiction between private appropriation through profit/investment and the world-wide deployment of productive forces. In this sense, decomposability marks the limits of a specifically social analysis. All social explanations make certain assumptions about decomposability. But such assumptions are never self-evident and never justified without an argument.

Because of its characteristic relations of production and tacit knowledge of the abstract individual, the stress discourse cannot set limits on decomposing society. In the discourse, all social processes and structures can be legitimately reduced to the attributes of individuals, and it is for this reason that it denies the need for arguments about decomposability [71, Chap. 1; 72, Chap. 2]. The result is a form of social analysis which can freely proliferate empirical structures, often as factors mediating between inputs and outputs, according to the analyst's needs. In this way, analysis detaches knowledge, action, and events from their social settings.



These points hold equally for stress research outside of life event analysis. The large scale studies by Leonard Pearlin and his colleagues [73-75] are good examples in this connection because they concentrate on the *on-going* stressful circumstances of everyday life that are explicitly excluded from lists of stressful life events.

Pearlin 1977 focuses on "some of the bonds existing between stratified social organization, the structure of marital transaction and the pattern of individual stresses within marriage". Informants were instructed to select multiple choice answers keyed to a standard set of questions. Questions and answers were constructed to produce facts about the relation between "role strains" (inputs identified as verbal and non-verbal exchanges between informants and their spouses) and "stresses" (outputs identified with the intensity of emotional distress that informants are aware of and experience with particular role strains). Each informant's responses were coded according to his or her "status background," which Pearlin identified by comparing the occupations of the informant's father and father-in-law. Occupations were ranked 1-7, using a scale borrowed from Hollingshead [76]. This enabled Pearlin to compare stress and strain among individuals whose marriages are hypergamous, hypogamous, and between equals.

Now there is a rather fundamental objection that can be raised against this notion of status, since Pearlin indicates neither why he decided on this particular hierarchy nor what it is supposed to mean to the people to whom it is attributed. Would all "skilled manual employees" agree to their ostensible status inferiority to clerks and salesworkers? Nor is it clear what the ranking would mean to informants who would say that they "agree" with it. We rank the same individual on various occasions and for different reasons. Do we always use the same standard? It is at least plausible that the psychological effects, in one context, of status differences based on their fathers' occupations would be cancelled or attenuated by other ranking criteria when spouses interact in other contexts. In brief, one wonders what social or experiential space is being taken up by "status background".

Pearlin 1977 does not try to link stresses and strains to particular symptomatic outcomes. A more recent study, Pearlin and Schooler 1978, does. It analyzes coping resources and responses as sets of mediating factors that help explain the course of events between exogenous input (role strain) and symptomatic outcome. Four areas of role strain—marital, parental, occupational, household economic—are divided into strain items. For example, marital strain is divided into non-acceptance by spouse, non-reciprocity in give and take, and frustration of role expectations. Pearlin and Schooler produce knowledge about these inputs by asking each informant to indicate whether he agrees or disagrees with a set of statements describing some behavior or circumstances relevant to each strain item. In the case of frustrated role expectations, for instance, he is asked if his spouse is a good housekeeper/wage earner, spends money wisely, is a good sexual partner.

Pearlin and Schooler give no grounds for supposing that people's everyday experiences can or should be divided up in this way—that they represent some

experiential or social reality. The authors write only that their input items reflect "themes" which emerged in the course of relatively unstructured interviews with a sample of informants. But are the interviews expected to elicit material knowledge, rationalized knowledge, or theoretical knowledge? Does an interview with "researchers" produce public knowledge or shared knowledge? Is an "unstructured" interview merely one which is tacitly structured?

Similarly, Pearlin and Schooler learned their informants' psychological resources for coping (mediating factor 1) by eliciting statements related to self-denigration, mastery, and self-esteem. Regarding self-denigration, for example, the informant was asked whether he feels useless at times, is no good at all, wishes he could have more self-respect, is inclined to feel he is a failure. The informant's statements are treated as evidence of his context-independent knowledge of himself, and this knowledge is transformed and reified in the analysis into the informant's psychological disposition.

Finally, Pearlin and Schooler list 19 coping responses (mediating factor 2). Here they produce knowledge in ways which clearly desocialize and psychologize their informants' life situations. First, they operationalize coping (a term signalling the actor's passivity) as an individual's attempt to alter his perceptions and appraisals of stressful circumstances—techniques which include selective ignoring, positive comparisons, optimistic faith. Second, they conflate the informant's appraisal of his circumstances with the material circumstances themselves—e.g. they ask him if he *often tries* to find a *fair compromise* in marriage problems (my italics).

Thus Pearlin and his colleagues write about a more complicated sequence of events than do stressful life event analysts, since he does not skip over the steps connecting exogenous threats with emotional arousal. But the apparent complexity is achieved through the untheorized proliferation of sociological variables, by fragmenting and obscuring the social processes and forces which determine the distribution and virulence of stresses, strains, and outcomes in society. (Why, for example, have Pearlin and Schooler chosen 4 role areas, 3 dispositions, and 19 responses, rather than some other numerical configurations?)

I must emphasize that my remarks are not intended to show that Pearlin's analyses are weak. Rather, I want to call attention to the fact that he found it unnecessary to raise these questions himself, that, in his sense, my remarks are irrelevant or misplaced. My comments and objections cannot be generated by his interpretive schemes and they are inconsistent with his process of producing knowledge. From the point of view of Pearlin and his associates, the meaning and validity of individual and social variables depends on whether they can be statistically associated with other, independent sets of variables (e.g. status background associated with self-reported stresses and strains). In terms of my approach, on the other hand, the empiricist's proof-by-association is "meaningless" because (1) it is based on shared knowledge and, therefore, only problematically related to the informant's behavior, and (2) confuses knowledge with the experiential determinants of knowledge. That is, the empiricist treats the individual's knowledge as if it



were epistemologically homogeneous, undialectical, and existed independently of the particular historically determined contingencies in which it is used and elicited.

In these studies, decomposability means freedom to proliferate the "role areas" and "status backgrounds" within which stress processes take place. Similar tendencies are also found in *programmatic statements* made by other people writing about the social context of stress. These programs are generally little more than untheorized lists of social circumstances associated with stress inputs. Some are cursory statements repeating the conventional wisdom of introductory textbooks. Rabkin and Struening [77, p. 1018], for example, suggest that stress inputs are affected by "personal factors" such as biological and psychological threshold sensitivities, intelligence, and verbal skills, and "demographic factors" such as age, education, income, and occupation. Other programs defer entirely to the reader's own inclinations. Thus, Stahl *et al.* [78, p. 36] write that an analyst's "list of structural [sic] characteristics is limited only by the imagination of the researcher". Even more serious programs fail to cohere because they propose to bring together contradictory orders of knowledge—i.e. theoretical knowledge about structural reproduction and hierarchies of determinants, on the one hand, and theoretical knowledge of the abstract individual, on the other—without indicating how these orders can be made compatible. Liem and Liem [79], for example, cite the importance of social class, social networks, and the family as structural determinants of psychiatric impairment related to stress. But their program concludes with a list of unarticulated approaches, connecting structure to individual behavior through, e.g. the internalization of values, patterns of interaction, and "non-social" [sic] conditions such as differences in financial resources.

#### CONCLUSION

Science produces facts, it does not uncover them. The factors responsible for producing the facts of a

particular scientific discourse also determine its specificity.

The specificity of the stress discourse is determined by a combination of social relations of production and theoretical knowledge that obviates questions about the non-decomposability of society. That is, the issue of determining a set of points beyond which the analysis of society cannot go without fragmenting and mystifying processes and arrangements responsible for reproducing the society's characteristic structure lies outside the limits of what the stress discourse can or needs to ask, state, or provide by way of experience.

Because the stress discourse is a social discourse—it claims to situate pathogenesis within everyday experience—its specificity has important ideological consequences in the sense of legitimizing existing social arrangements [80].

Sociologists and anthropologists tend to write about legitimization mainly in terms of how particular practices state and affirm sets of values which explain and support given social arrangements. The stress discourse legitimizes by affirmation; it gives epistemological grounds for conventional beliefs about society. But it legitimizes the social order not merely by reflecting it, not only by supplying it with the metaphors needed for its self-objectification. It also legitimizes through denial, that is, by substantiating theoretical knowledge that makes it difficult to take alternative and critical understandings seriously. People accept social, political, and economic arrangements even when they do not internalize the values that underwrite them, even though they sometimes regard these arrangements as undesirable. In these circumstances, social arrangements are legitimate because people believe they are inevitable, that there are no realistic alternatives, and not because they are just or right.

Denial is an aspect of specificity and, therefore, it is intrinsic to all discourses. Conventional beliefs about man's social nature and the forms of social organization it gives rise to are the products of many dis-

Table 2. How knowledge of stress is produced and conventional knowledge of society is reproduced

<i>Theoretical knowledge of stress</i>	<i>Labor process</i>
Tacit knowledge of the abstract individual is given an ontological advantage by (1) an empiricist epistemology and (2) naturalization through authority by analogy with biomedicine.	Through the hierarchical division between intellectual labor and the simple fragmented tasks of free and equal producers, shared knowledge is objectified as stress data.
<i>Material knowledge</i>	
Knowledge of pathogenesis is de-socialized by means of (1) somatization (Glass), objectification (life event analysis), and conflation (Pearlin), and (2) the untheorized proliferation of sociological variables in the absence of a sociological <i>terminus a quo</i> .	
<i>Conventional knowledge of society</i>	
Conventional understandings are (1) confirmed by facts and (2) provided with a useful metaphor ("stress") for objectifying social life.	
<i>Generic labor process</i>	<i>Alternative knowledge of society</i>
The characteristic social relations of production are made commonsensical.	This is obviated.

Key: Factors on top determine the ones under them.

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courses and experiences. What is special, but not unique, about the stress discourse is the form in which its powers to deny have been developed by incorporating empiricist premises, adopting methods and language analogous to and symbolically resonant with many of those of the physical sciences, and naturalizing and somatizing in biomedical evidence its theoretical knowledge of society (See Table 2.)

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## REFERENCES

- Young A. Order, analogy and efficacy in Ethiopian medical divination. *Cult. Med. Psychiat.* **1**, 183, 1977.
- Cf. Althusser L. Ideology and the state. In *Lenin and Philosophy and Other Essays* (Edited by Althusser L.), p. 127. NLB, London, 1971. Given the distinction I am proposing, it is possible that a particular formal ideology, if its tenets are framed abstractly enough, might be compatible with more than one tacit ideology.
- Wallace A. F. C. Mazeway resynthesis: a biocultural theory of religious inspiration. *Trans. N.Y. Acad. Sci.* **18**, 626, 1956.
- Cannon W. B. The general adaptation syndrome and the diseases of adaptation. *J. clin. Endocr.* **6**, 117, 1946.
- Selye H. *The Stress of Life*. McGraw Hill, New York, 1956.
- Mason J. W. A historical view of the stress field. *J. Hum. Stress* **1**, 6 (March, part 1) and 22 (June, part 2), 1975.
- Dohrenwend B. S. and Dohrenwend B. P. *Social Status and Psychological Disorder*. Wiley, New York, 1969.
- Dohrenwend B. S. and Dohrenwend B. P. The conceptualization and measurement of stressful life events: an overview of the issues. In *The Origins and Course of Psychopathology: Methods of Longitudinal Research* (Edited by Strauss J. S., Babigan H. M. and Roff M.), p. 93. Plenum, New York, 1977.
- Pearlin L. I. and Schooler C. The structure of coping. *J. Hlth Hum. Behav.* **19**, 4, 1978.
- Mason J. W. A reevaluation of the concept of 'non-specificity' in stress theory. *J. Psychiat. Res.* **8**, 323, 1971.
- Mason (1975) *op. cit.*
- Selye H. Confusion and controversy in the stress field. *J. Hum. Stress* **1**, 37, 1975.
- Lazarus R. S. Stress. In *The International Encyclopedia of the Social Sciences* (Edited by Sills D.), p. 337. Macmillan, New York, 1968.
- Lazarus R. S. A cognitively oriented psychologist looks at biofeedback. *Am. Psychol.* **30**, 553, 1975.
- House J. S. Occupational stress and coronary heart disease: a review and theoretical integration. *J. Hlth Soc. Behav.* **15**, 12, 1974.
- Lazarus (1968) *op. cit.*
- Rabkin J. G. and Struening E. L. Life events, stress, and illness. *Science, N.Y.* **194**, 1013, 1976.
- Dohrenwend B. S. Anticipation and control of stressful life events: an exploratory analysis. In *The Origins and Course of Psychopathology: Methods of Longitudinal Research* (Edited by Strauss J. S., Babigan H. M. and Roff M.), p. 135. Plenum, New York, 1977.
- Dohrenwend and Dohrenwend (1977) *op. cit.*
- Lazarus (1968) *op. cit.*
- Young (1977) *op. cit.*
- Bourdieu P. *Outline of a Theory of Practice*. Cambridge Univ. Press, Cambridge, 1977.
- Young A. Mode of production of medical knowledge. *Med. Anthropol.* **2**, 97, 1978.
- Godelier M. Infrastructures, societies, and history. *New Left Rev.* **112**, 84, 1978.
- Dumont L. *Homo Hierarchicus*. Univ. of Chicago Press, Chicago, 1970.
- Dumont L. *From Mandeville to Marx*. Univ. of Chicago Press, Chicago, 1977.
- Brenner M. H. *Mental Illness and the Economy*. Harvard Univ. Press, Cambridge, MA, 1973.
- Moscovici S. Society and theory in social psychology. In *The Content of Social Psychology: A Critical Assessment* (Edited by Israel J. and Tajfel H.), p. 17. Academic, New York, 1972.
- Giddens A. *New Rules of Sociological Method*. Hutchinson, London, 1976.
- Lukes S. *Individualism*. Harper & Row, New York, 1973.
- Habermas J. *Legitimation Crisis*. Beacon, Boston, 1973.
- Brittan A. *The Privatised World*. Routledge & Kegan Paul, London, 1977.
- Earlier in this paper, I distinguished between tacit ideologies and formal ideologies. In terms of the problematic of knowledge, tacit ideologies are instances of theoretical knowledge. Not all tacit theoretical knowledge is ideological, of course. Tacit knowledge of the abstract individual is an example of tacit ideology. Depending on the context we are observing, formal ideology is sometimes theoretical knowledge (i.e. a set of principles through which an individual more or less consciously shapes his knowledge of society) and, in other circumstances, public or shared knowledge clothing beliefs that the individual produced or arrived at by other means.
- Barnes B. *Scientific Knowledge and Sociological Theory*. Routledge & Kegan Paul, London, 1974.
- Barnes B. *Interests and the Growth of Knowledge*. Routledge & Kegan Paul, London 1977.
- Habermas (1973) *op. cit.*
- Habermas J. *Knowledge and Human Interests*. Beacon, Boston, 1971.
- Feyerabend P. *Against Method*. NLB, London, 1975. See in particular, pp. 24-7, 38-9, 43-7, 148-53, and 168 on the empiricist's "autonomy principle" and pp. 278-85 on the "incommensurability" of theories.
- Glass D. *Behaviour Patterns, Stress and Coronary Disease*. Wiley, New York, 1977.
- Glass (1977) *op. cit.*
- Glass (1977) *op. cit.*
- Friedman M. *Pathogenesis of Coronary Artery Disease*. McGraw Hill, New York, 1969. Cited in Glass (1977) *op. cit.*, p. 24, emphasis in the original.
- See Prattis I. Strategizing man. *Man* **8**, 46, 1973.
- Glass's proposition that Type A individuals are driven to gain control of challenging or threatening situations, and bring a modicum of hostility to these situations, raises an additional question. His interpretations are based on his informants' behavior during two situations, pre-treatment and subsequent puzzle-solving. Yet it is conceivable that there is also a third situation constituted by the post-experiment interview, during which Type A individuals attempt to assert control by re-interpreting their experiences of the first two situations in a non-threatening way.
- Glass (1977) *op. cit.*

46. Holmes T. H. and Rahe R. H. The Social Readjustment Rating Scale. *J. Psychosom. Res.* **11**, 213, 1967.
47. Holmes T. H. and Masuda M. Life changes and illness susceptibility. In *Stressful Life Events: Their Nature and Effects* (Edited by Dohrenwend B. S. and Dohrenwend B. P.), p. 45. Wiley, New York, 1974.
48. Rahe R. H. The pathway between subjects' recent life changes and their near-future illness reports: representative results and methodological issues. In *Stressful Life Events: Their Nature and Effects* (Edited by Dohrenwend B. S. and Dohrenwend B. P.), p. 73. Wiley, New York, 1974.
49. Holmes and Masuda (1974) *op. cit.*
50. Hudgens R. W. Personal catastrophe and depression: a consideration of the subject with respect to medically ill adolescents, and a requiem for retrospective life-event studies. In *Stressful Life Events: Their Nature and Effects* (Edited by Dohrenwend B. S. and Dohrenwend B. P.), p. 119. Wiley, New York, 1974.
51. Brown G. W. Meaning, measurement, and stress of life events. In *Stressful Life Events: Their Nature and Effects* (Edited by Dohrenwend B. S.), p. 119. Wiley, New York, 1974.
52. Sarason I. G., de Monchaux C. and Hunt T. Methodological issues in the assessment of life stress. In *Emotions: Their Parameters and Measurement* (Edited by Levi L.), p. 499. Raven Press, New York, 1975.
53. Rabkins and Struening (1976) *op. cit.*
54. Pearlin L. I. and Johnson J. S. Marital status, life strains and depression. *Am. sociol. Rev.* **42**, 704, 1977.
55. Gersten J. C., Langer T., Eisenberg J. G. and Simcha-Fagan O. An evaluation of the etiologic role of stressful life-change events in psychological disorders. *J. Hlth Soc. Behav.* **18**, 228, 1977.
56. Dohrenwend and Dohrenwend (1969) *op. cit.*
57. Dohrenwend and Dohrenwend (1977) *op. cit.*
58. Dohrenwend B. S. Social status and stressful life events. *J. Personal. Soc. Psychol.* **28**, 225, 1973.
59. Dohrenwend, B. S., Krasnoff L., Askenasy A. R. and Dohrenwend B. P. Exemplification of a method for scaling life events: the PERI life events scale. *J. Hlth Soc. Behav.* **19**, 205, 1978.
60. Dohrenwend *et al.* (1978) *op. cit.*
61. Holmes and Masuda (1974) *op. cit.*
62. Dohrenwend *et al.* (1978) *op. cit.*
63. See the comments of research with small groups in Rahe (1974) *op. cit.*, pp. 76-7.
64. Brown (1974) *op. cit.*
65. Dohrenwend *et al.* (1978) *op. cit.*
66. Dohrenwend and Dohrenwend (1977) *op. cit.*
67. Dohrenwend *et al.* (1978) *op. cit.*
68. Sarason *et al.* (1975) *op. cit.*
69. Notwithstanding appeals to the authority of the natural sciences, e.g. Holmes and Masuda (1974) *op. cit.*, p. 47: The "method for assigning magnitude [i.e. weights for life events] was developed for use in psychophysics—the study of the psychological perception of the quality, quantity, magnitude, and intensity of physical phenomena."
70. Dohrenwend *et al.* (1978) *op. cit.*
71. Dumont (1970) *op. cit.*
72. Lukes (1973) *op. cit.*
73. Pearlin L. I. Status inequality and stress in marriage. *Am. sociol. Rev.* **40**, 344, 1975.
74. Pearlin and Johnson (1977) *op. cit.*
75. Pearlin and Schooler (1978) *op. cit.*
76. Hollingshead A. B. A method for calculating two-factor index of social position (mimeographed). Yale Univ., New Haven, 1958.
77. Rabkin and Struening (1976) *op. cit.*
78. Stahl S. M., Grim C. E., Donald C. and Neikirk M. J. A model for the social sciences and medicine: the case for hypertension. *Soc. Sci. Med.* **9**, 31, 1975.
79. Liem R. and Liem J. Social class and mental illness reconsidered: the role of economic stress and social support. *J. Hlth Soc. Behav.* **19**, 139, 1978.
80. Young A. Some implications of medical beliefs and practices for social anthropology. *Am. Anthropol.* **78**, 5, 1976.

## OF BLOOD AND BABIES: THE RELATIONSHIP OF POPULAR ISLAMIC PHYSIOLOGY TO FERTILITY\*

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**Abstract**—Popular beliefs about female physiology held by most women in provincial Iran have far-reaching consequences for women's behavior and attitudes as they relate to fertility and contraception. These beliefs are grounded in the classical Galenic-Islamic medical theories concerning natural temperament, the reproductive system, blood and the heart. These theories provide models for understanding conception, pregnancy, contraception and the effects of the contraceptive pill upon women's bodies. Popular medicine also provides a vocabulary of disorders of womanhood—heart distress, weak nerves, lack of blood, and aches and pains. These disorders are commonly believed to be side effects that result from use of the contraceptive pill, and are reasons frequently given for discontinuing contraception or never entering a family planning program. The "health-related" complications encountered in sustained usage of contraceptive methods such as the birth control pill, the high degree of dissatisfaction with new contraceptive methods and with the clinicians who encourage their use, and the ambivalent feelings experienced by women who practice or consider practicing birth control are more clearly understood in light of these popular beliefs concerning female physiology.

### OF BLOOD AND BABIES

When married women in provincial Iran gather with female relatives and friends, their conversations frequently turn to "blood and babies" [1]. Topical concerns of bodily health, emotional states, conception and contraception, pregnancy and birth and sexual relations dominate many conversations, especially with intimates. Such concerns are not limited to private gatherings however. Women who attend family planning and public health clinics exchange information and complaints on the side effects of contraceptive methods (specifically "the pill"), of the impact on their bodily functions of pregnancy, contraception, emotional distress, and the rigors of raising children. The disorders of womanhood—heart distress (*naraha-tiye qalb*), heart palpitations, weak nerves, anemia (*qansizlikh*—paucity of blood), and aches and pains—are complaints common to all social classes of women in provincial Iran. Although these disorders are extremely prevalent and frequently discussed, Iranian women receive little comfort from the system of modern cosmopolitan medical care. Physicians in particular appear incapable or unwilling to seriously address such complaints raised by their female patients. These problems of communication are in part due to discrepancies between the popular models of female physiology held by most female patients and the biomedical model of female physiology held by male physicians and clinicians trained in the traditions of modern medicine.

Popular beliefs about female physiology held by most women in provincial Iran have far-reaching consequences for women's behavior and attitudes as they relate to fertility norms and contraceptive practices

[2]. The "health-related" complications encountered in sustained usage of contraceptive methods such as the birth control pill, the high degree of dissatisfaction with new contraceptive methods and with the clinicians who encourage their use, and the ambivalent feelings experienced by women who practice or consider practicing birth control are more clearly understood in light of these popular beliefs of female physiology [3].

The following discussion examines the popular beliefs about female physiology held by many Iranian women, and their relationship to the high traditions of Galenic-Islamic medicine; the social distribution of these popular models in the town of Maragheh, and several reasons for their persistence into the contemporary era; and the influence of these popular beliefs and models of physiology on fertility behavior and contraceptive practices in the contemporary era. The data presented in this paper was primarily collected in the community of Maragheh, a provincial town in Azerbaijan, in northwest Iran. The town, once a Mongol capital in the thirteenth century, has a population of over 63,000, the vast majority of whom speak a Turkish dialect (*Turki*). It is a sub-provincial capital (*shahrestan*). Additional material from several villages in the environs of Maragheh and Rezaiyeh is also included. However, the cultural models of popular physiology presented in this paper are not confined to Azerbaijan, nor to provincial Iran. Discussions with women in metropolitan Iran and with researchers in other Middle Eastern societies suggest that these models and the problems they imply for contraceptive practices are found throughout the Islamic Middle East [4].

### POPULAR ISLAMIC PHYSIOLOGY AND THE GALENIC-ISLAMIC MEDICAL TRADITION

Popular notions of physiology that are prevalent in Iran today are largely framed by the structure of the high traditions of Galenic-Islamic medicine [5]. Al-

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though beliefs about the functioning of the body are not always formulated into a coherent theoretical system or explicit model, most individuals in our study exhibited an elaborate set of assumptions about their body functioning. In addition, they interpreted their illnesses and malaise, and the reactions of their bodies to stresses in their daily lives, in terms of these assumptions. This discussion emphasizes the assumptions and beliefs that concern female physiology in particular. These include notions of the nature of female temperament (*tabi'i*), the structure of the reproductive system, the function of blood, and the role of the heart and nerves. The relationship between these popular beliefs and the classical theory of Gelanic-Islamic medicine will be explored.

#### *Natural temperament: Tabi'i*

Individuals in Maragheh believe each person has a characteristic temperament that is one's particular physiological norm. These personal physiological constitutions are affected by climate and geographical location. In most cases, discussions of *tabi'i* or temperament refer to an individual's balance between hot and cold, rather than to a personality type. Susceptibility to various disorders, to food categories which are illness-provoking, to chills, fright, or emotional upset varies according to one's temperament. Similarly, responsiveness to various therapies, especially food and herbal therapies, varies with temperament. Thus people will often describe their own temperaments in terms of their bodies' responses to various classes of foods: "My nature is hot; hot food harms or upsets me" (*"Tabi'im isdilikhdi; isdi' gaza mani zarar eler"*); "My nature is cold; too much cold food gives me harm" (*"Tabi'im soghukhlukhdi; chokh serin gaza mani zarar verir"*). When a drug disagrees with an individual, a similar statement may be made.

Although natural temperaments are thought to vary by individual, and in certain cases by family [6], they are also believed to vary by sex, by place in the life cycle, and in special situations such as childbirth. Thus females are considered to be relatively colder than males (and therefore less perfect, according to Galen) [7]. The young are relatively hotter than the old, whose innate body heat has gradually cooled and thus left them more susceptible to "damp" illnesses such as rheumatism. Baby boys are considered to be hotter than baby girls, and the new post-partum mothers of baby boys are thought to have hotter bodies, hotter milk, and hotter temperaments or natures than post-partum mothers of baby girls.

These beliefs about female temperament are particularly important for regulating the diet and behavior of women in the first 40 days after delivery of a child. Women who deliver baby girls are given concoctions of honey, flour and butter (*khurmagi*) to increase their bodily heat to ensure that the next child born will be a boy. The honey-butter-flour mixture is also considered a balm of internal organs, such as the uterus or the stomach. (Women in the study disputed which organ.) Other "hot" foods such as pistachio nuts and eggs are given to post-partum mothers to strengthen their bodies and to combat "coldness". In addition, new mothers do not use cold water for bathing, ablutions or cleaning until after the first 30 days.

Although the traditions of diet and treatment in terms of one's physiological temperament have great persistence in Maragheh, they have begun to adapt in response to new forms of childbirth and the introduction of new foods and therapies. The following case illustrates some of these adaptations as well as the persistence of traditional beliefs.

#### *Case I*

Zari, a young teacher, planned to deliver her child in "a fancy hospital in Tabriz". Her mother, the wife of a bazaar merchant, who had delivered all her children at home with the help of a neighbourhood midwife, was distressed at her daughter's break with tradition. However, Zari agreed to return to her mother's home for post-partum care. Prior to her hospital delivery, Zari and her mother had fierce arguments over which form of delivery was best—at home with a traditional midwife, or in a hospital with a doctor in attendance—and over what type of prenatal care and prenatal diet was best for her child. Zari was convinced that her diet and emotional state (more than her natural temperament) would affect the health and appearance of her baby. She exclaimed to her mother and to the author,

"Why are the children of the rich so beautiful? Especially when their parents are not so beautiful? Why do their children have white skin and red cheeks, while our children come out black like us? Look at Khanum K.'s children; they are beautiful but the parents aren't.... When a woman is pregnant, good food is important to the child. [The rich] first follow the best path. They go to a good doctor, one who charges money, a private doctor. Every month that doctor gives them medicine and diets to follow.

"They eat good food and they don't go to the doctor just a couple of times, they go every month. But some of those doctors want the babies to be so large that they will have to perform Caesareans to get them out! ... I pay my doctor twenty tomans (\$3.00) for each visit. I didn't buy any of the medicines he said to buy so the baby wouldn't be so large I'd have to have a Caesarean. But the rich have better food. We eat *ash* and *abgusht* (soup and stew—common everyday fare) and get sick. We are just steeped in blackness, mourning, sadness, but not the rich.... The teachers at school say my child will take on a black spirit if I always wear black. Look at Khanum K.—she wore white all during Moharram!" (Zari was in mourning, first during the months of Moharram and Sefer in commemoration of Imam Hosein's martyrdom, and then in honor of her paternal grandmother who had recently died.)

Despite Zari's modernism and her disagreements with her mother over appropriate traditions to follow in childbirth, she was more than happy to follow traditional diet therapies after the birth of her daughter. However, during hospitalization after the delivery, she was given milk to drink instead of the honey and butter mixture, and fruit to eat, which her mother thought was "cold" food. Zari's mother did note that bananas (recently introduced to provincial Iran) were acceptable post-partum food because they were warm. Zari, after returning to her mother's home, ate only hot foods "because I am cold, since I gave birth to a girl", and she avoided foods such as garlic, radishes and onions because "they have wind (*ye*) and cause harm (*ziyan eler*)" to new mothers. Zari also ate foods such as pistachios and drank herbal remedies

(*bitmish*—distillation of pussy willow) to build up her strength and her blood. Her mother noted that no one eats cold foods after giving birth because "the face and eyes will get puffy from them".

The popular beliefs about natural temperaments, the influence of diet on temperament, and the categorization of "hot" and "cold" foods and herbal remedies, which are held by the people of Maragheh, are clearly grounded in the classical traditions of Galenic-Islamic medicine. Galen, and later Ibn Sina, held that females are colder than males and therefore less perfect because of the physical structure of their bodies. Galen noted that the reproductive organs of the male are external while the female is "mutilated" with her reproductive organs turned inside. The female's reproductive organs, because she has less "heat", are unable to "emerge and project on the outside". Galen also postulated that women feel "especially cold during childbirth; for then the throat of the uteri become straight and wide open and hence, if it were always so, they would always be cold" [8].

In the classical system, male-female temperaments are categorized along with the four humors (phlegm, black bile, bile, and blood), the four organs (brain, spleen, liver, and heart), and the four elements (water, earth, fire, and air) along moist-dry and cold-hot axes. These basic correspondences and oppositions of classical Islamic cosmology are much more embellished and elaborate than the popular beliefs of most contemporary Iranians, which have remained fairly simple as described above [9]. Although many individuals attend to the basic distinctions of hot-cold and refer to the effects of dampness and dryness on natural temperaments and physiological functions [10], and thereby hold a popularized version of traditional Islamic medicine, the more fully elaborated models of the Galenic-Islamic tradition appear to be the specialized knowledge of those few individuals in provincial Iranian society who have maintained the traditions of the *hakims*.

#### *The reproductive system and blood*

Popular conceptions of the reproductive system and of the function of blood in reproduction are popularized versions of the Galenic-Islamic tradition, as are the beliefs about natural temperament. One source of these beliefs are the texts on the Medicine of the Prophet (such as Al-Suyuti's *Tibb-ul Nabbi*—Medicine of the Prophet). These formulations may be viewed as lay versions of the more sophisticated models of reproduction in classical theory.

The common explanatory model of conception held by most Iranian women is that "the man contributes the seed, the woman provides the vessel in which the seed grows". There is no general notion of the production of ova, of the existence of ovaries or fallopian tubes, or even of female "sperm" or testes as in the Galenic tradition [11]. Thus women are greatly concerned about the condition and health of their uteri, and numerous home therapies for infertility focus on altering or improving the state of the uterus or "vessel". One uneducated but brilliant woman, who was extremely interested in the functioning of the body, explained to me her notion of conception, which was also a common belief among her neighbours and friends.

"When we sleep with our husbands [have sexual intercourse], we become pregnant when none of the man's liquid, his seed [singular] drips out when we stand up. Then we say that the seed has entered the womb. The womb is like a container for the seed to grow in. The man has only one seed each time he has sex. The woman has no seed, only the container, her womb. . . . In my mother's time, when someone failed to bear children, they used to tie onions around the woman's waist or use a poultice of honey and oregano which they would put against her uterus (over her abdomen). The woman would bend over these in the morning before breakfast and she would remain in a crouching position for half an hour. This would strengthen her uterus and help her to conceive.

"We know we are pregnant when we don't get our periods. This is after 40 days when the child is as big as the end of my finger. After 40 days, (pregnant women) get nausea and desire special food. The child is the size of a bee or a big donkey fly. After three months the child is the size of a sparrow. After seven months the child begins to swim around in the uterus. If it's a boy, he goes back and forth from side to side. If a girl, up and down, and she's heavy like a ball of yarn. If it's a boy, it's like a fish.

"Some pregnant women have a discharge which is yellow and some have bleeding every month. If it's a yellow discharge, we say the child is shedding its coverings which are dirty (*kasif*). If there is bleeding, some say the child will be a religious scholar, a *mujtahid*. (When labor begins) . . . if the child is a boy the pains start in the lower back and move to the front; if a girl, the pains start in the front, and move to the back."

The function of blood is also central to the reproductive process in the popular explanatory models. Beliefs about the function of blood in female physiology are associated with beliefs about the polluting and nutritive qualities of menstrual blood and the physical weakness of women. When women are not pregnant, they are concerned that their menstrual blood will be free-flowing. The production of menstrual blood confirms a woman's fertility and is highly valued. A reduction in menstrual flow not caused by pregnancy or nursing is distressful to most women, who view it as a sign of loss of youth, fertility, and physical attractiveness to their husbands.

Menstrual blood is believed to be "dirty blood" (*Kasif qan*), of a dark rather than red color. If it moves throughout the body, instead of being discharged through free-flowing monthly periods, it can cause darkness of skin and aches and pains of the body, especially in the joints and head. If a woman has a lessened blood flow, she feels that some menstrual blood remains in her body, thus polluting it. The notion of dirty blood is a popularization of the Galenic theory of morbid atribilious humor, which, when present in the blood, should be expelled through venesection. Today *hajamat* (cupping with bleeding) or simply cupping (*badkesh*) is used to relieve the polluted regions. In the *Tibb-ul Nabbi* of Al-Suyuti venesection was recommended to start up menstrual flow. In the context of Islamic beliefs, menstrual blood (and the blood of childbirth) is not only physically polluting to the body, but is also ritually polluting. Menstrual blood is one of 10 or 12 categories of *nejasat*, items which are ritually unclean, including feces, urine, and the sweat of sexual exertion.

Despite the polluting qualities of menstrual blood, it is considered a necessary element in reproduction.

Blood, supplied by the mother's body, provides nutrients to the growing fetus. Thus menstrual blood is transformed during pregnancy into food for the child. Many women contend that females who are several months pregnant have healthier bodies because the "dirty blood" (*kasif qan*) of the menses is consumed by the fetus, thus ridding the mother of her natural pollutant. One woman noted that "for the first several months of pregnancy the mother often feels uncomfortable; but after that time the child in the womb grows large enough to begin drinking the blood; for this reason the mother often feels better during the later months of pregnancy". A traditionally trained midwife also noted that "women who have given birth have healthier, cleaner bodies than those who have not borne children, because the dirty blood of the body is expelled during the birth of the baby". Among more traditional households (though not necessarily uneducated ones), there is a common practice of ridding newborn infants of the dirty blood they consumed while still in the womb. Small razor cuts are made in several key spots (head, joints, back) to allow the dirty blood to escape. This practice of *tige* (razor cuts for bleeding) has gone out of fashion in upper class households, but a surprising number of young educated couples allow their traditional mothers or mothers-in-law to practice *tige* on their newborn children. Another practice, that of cupping with bleeding (*hajamat*) on the swollen uterus is occasionally done during the last trimester of pregnancy. One woman pointed out that *hajamat* would rid her body and thus the fetus of excess dirty blood, and her child would be born less dark (*qara*) and therefore more beautiful. Too much consumption of menstrual blood can make a baby dark-skinned.

Because women's bodies produce menstrual blood and expend quantities of blood during childbirth, miscarriages, and abortions, women frequently complain of being *qansiz* or anemic. Sensations of physical weakness are expressed in terms of paucity of unpolluted blood. Emotional disorders are often expressed in this idiom as well. Paucity of unpolluted blood can be corrected through the use of tonics, herbal medicines, and food that is "hot", high in energy and strengthening to the body. Thus, the young woman discussed above, who gave birth in a Tabrizi hospital, was given "hot" foods and herbal therapy to strengthen her blood as well as to offset her body's "coldness". The association of physical strength and vigor with adequacy of blood is an old one in popular health culture. Even Ibn Sina attempted to correct what he felt was a false interpretation of the function of blood:

"Some think that strength of body depends on abundance of blood; that weakness is associated with paucity of blood. But it is not so. It is rather this, that the state of the body determines whether nutrients will be beneficial to it or not" [12].

The models of the reproductive system in the classical Galenic-Islamic tradition are considerably more complex than the popular version presented above. Galen distinguished between male and female semen, menstrual blood, and left and right uteri and testes in his analysis of the contribution of each sex to the process of conception. He noted that the female could

not conceive without the presence of male semen, which "represents the principle of motion" and generation [13]; therefore female semen is insufficient to produce a fetus. In addition, female menstrual blood is not "suitable material for the generation of the animal" [14]. Male embryos are generated by semen produced by the right testis in men and the right uterus in women; female embryos by the left testis and left uterus. In Galenic terms the reproductive parts on the right side of the body "are very much warmer than those on the left because they are not only nourished differently, but also have been placed in a straight line with the liver" [15]. Thus being warmer and stronger, they generate male children. Regardless of the sex of the fetus, the female provides nutriment through the blood vessels which extend to the uteri. These are normally the vessels through which "surplus" or menstrual blood flows. During pregnancy, "this surplus accumulates in these common vessels as in reservoirs of nutriment" [16] until the surplus in the eighth month begins to pass to the breast as milk for nursing the newborn.

Galen's fundamental propositions regarding the reproductive system were incorporated into Ibn Sina's work and later popularized in such treatises as the *Medicine of the Prophet* (see Al-Suyuti's *Tibb-ul Nabhi* Part III). Al-Suyuti's model of reproduction includes the classical notions of male and female semen or fluid, the notion of left and right uteri (though not testes), and the transformation of menstrual blood into nutriment for nursing. His model is less systematic than the Galenic tradition and differs from the classical one on several points. He described fetal development as a cooking process, to which is added Godly directions and interventions. He also referred to the earlier tradition of Muslim, in which the essential organs and bones are created from the fluid of the male, the flesh from the fluid of the female. He contended that the child resembles the parent with the greatest amount of fluid and sexual appetite [77]. Not all of these beliefs are found in contemporary models of female-male physiology. For example, the beliefs of a dual uterus, of male and female semen, and of the transformation of menstrual blood into breast milk were not common among our informants. However, other aspects of the contemporary popular model are present in Al-Suyuti's text—beliefs about the womb as a vessel, the male sperm as generative of life, the germinating period of 40 days, male infants as hot and female as cold, and menstrual blood as the source of fetal nourishment.

#### *The heart, the nerves, and female physiology*

A wide variety of illnesses and feelings of malaise are expressed in terms of the functioning and sensations of the heart (*qalb*) in popular medicine in Iran. The popular explanatory model of the heart is continuous with the Galenic-Islamic beliefs that "the heart is at once a central physiological organ (related to innate heat, nutrition, and distribution of the blood) and an organ of emotional functioning (or the seat of the vital soul) in man" [18]. As the central physiological organ, it becomes the focus of numerous health concerns. Individuals attend to the pulsing of their hearts as the body's essential motor; changes in heart rates and in the physical sensation of the heart,



such as palpitations, squeezing, burning, indicate physical or emotional disorder to the individual. Thus heart language is a basic idiom of health and illness for physical as well as affective states. Anxiety and emotional distress in response to life stresses are articulated in terms of "heart distress" (*narahatiye qalb*) [19].

In popular conceptions of physiology, the function of the heart, nerves and the blood are loosely related; yet in women's language of illness, heart distress, weak nerves, and paucity of blood are disorders that are held to occur in common. Women, because of their essentially weaker physical constitutions and the emotional stresses of their daily lives, are believed to be more prone to these illnesses than men. Thus heart distress is associated with *being female*—with pregnancy, with sexual intercourse, with contraception, with childbirth and raising children, and with being a wife.

The popular conceptions of female physiology discussed above persist as part of a social and cultural tradition that orders individual experiences of health and illness. The popular model is carried on via oral transmission within a social milieu in which basic common sense knowledge is passed from mother to daughter, and in which home therapies are practiced and taught. Although the popular literature of Islamic medicine is less significant for illiterate women, households with literate persons often use such texts as references for home therapies [20]. The social organization of family life and health care is essential to the persistence of these models. Most health care is carried out in the home, and women are primarily responsible for home based therapies. It is within the home, family and neighborhood settings, in gatherings with other women, that their knowledge and beliefs are shared. Because these medical models are essentially common sense rather than scientific frameworks for ordering the experience of illness and therapeutic methods, individuals have little difficulty incorporating into their set of beliefs the bits of biomedical knowledge they acquire in educational or cosmopolitan medical settings. Thus women discuss emotional distress in terms of "heart language" and "heart distress", as well as in terms of "nervous" disorders. This appears to be a twentieth century innovation in popular medical beliefs, buttressed by a proliferation of "nerve doctors". Individuals appear to have little difficulty in managing the diversity of logically opposed systems. Educated nurse midwives with some knowledge of the scientific model of reproduction frequently act in terms of their scientific model while in the professional medical setting; yet they may explain their own body functions and illnesses in terms of the popular model.

The popular conceptions of female physiology are generally held by women of all social groups in Maragheh, regardless of their educational background. Some educated women (and men) may hold both a modified version of the popular model and a simplified version of the biomedical model. But only the town's physicians appear to dismiss the popular models *in toto*, in favor of the biomedical model of female physiology. The social structuring of clinical interaction in Maragheh, as well as in most of Iran, inhibits the transmission of the physicians' bio-

medical model to their patients. Because of the enormity of status differences between physicians and most patients, little communication and teaching occurs in any organized fashion in clinical settings. Thus a popular version of the physicians' specialized bio-medical model is slow to emerge. The difference between the basic assumptions and explanatory models of female physiology and body functioning held by patients and physicians leads to problems in communication and dissatisfaction with health care. These differences are particularly problematic for birth control programs and services.

#### POPULAR BELIEFS ABOUT FEMALE PHYSIOLOGY, FERTILITY, AND CONTRACEPTIVE PRACTICES

Popular models of female physiology have wide implications for fertility behavior and contraceptive practices. Although these beliefs are only one of many variables that structure fertility norms in provincial Iranian society, they do play a significant role by giving one form of meaning to fertility-related behavior. Women often explain their fertility behavior and contraceptive practices in terms of these beliefs, and these beliefs in turn appear to influence their behavior. The relationship between beliefs and behavior—as related to fertility, to contraceptive practices, to beliefs about the birth control pill and its side effects, and more briefly to problems of clinical interaction that arise from discrepancies in explanatory models of patients and physicians—is explored in the following section.

##### Fertility

Women in provincial Iran are expected to conceive within the first year of marriage. Failure to do so casts doubt on one's ability to have children and therefore on one's status as a wife. Infertility is a social onus and, if long standing, a threat to one's marriage and social security. Extraordinary therapies are often undertaken by women who have failed to conceive—from the use of herbal remedies, to sacred medicine dispensed by prayer writers (*du'a nevis*), to visits to gynecologists in metropolitan centers. (Males are less frequently accused of sterility, although this is beginning to change due to the influence of biomedicine.) Few women are strong enough to resist the social pressures to demonstrate their fertility early in marriage. Even young university students or young couples, who initially intend to postpone having children for the sake of education, careers, and building a nest egg, find themselves discontinuing contraceptive practices after a few months of marriage [21].

Arguments for conception early in marriage are not limited simply to social expectations, but are intertwined with beliefs about female physiology and health. Women express their concern over fertility in terms of their health status as well as in terms of social expectations. All married women expect to have at least one child; a childless marriage is not considered an option. Given the assumption that one would have children, women are convinced that the most opportune time, in terms of their health, is early in marriage before using any form of contraception. The younger a woman is, the better the condition of her uterus, and the more likely she is to conceive quickly. The uterus is believed to become dry and less



strong as a woman gets older, and thus less receptive to the male "seed" and less able to carry a child to full term. Women also believe that their bodies are in a less healthy state, polluted with excess menstrual blood, until they have given birth to a child. Thus, pregnancy and birth are viewed as therapeutic. In one sense, childbirth may be seen as bringing health to one's body, to one's social position, and to one's marriage—strong justification for bearing children early in marriage.

With the recent introduction of the contraceptive pill and condom to Maragheh, women have developed a set of beliefs about how these methods affect long term fertility. Few women are willing to use the contraceptive pill to space their children until they have enough children to justify risking loss of fertility. (This varied in the survey study from 1 child to 5.) Many women believe "the pill" prevents pregnancy through some action on the uterus, making conception at a later time unlikely—although this is not borne out by most of their experiences. Others feel the pill ulcerates the uterus or weakens it in other ways. The condom was similarly viewed as having adverse effects on the uterus, through weakening by depriving it of moisture.

Concerns about loss of fertility and therefore one's status as a young and desirable wife also make it difficult for some women to use the contraceptive pill with regularity and continuity over time even after they have their desired number of children. This is the case for educated women, wives of professional men, as well as for illiterate women of the bazaar and working classes. A number of young educated women opt for abortion as a birth control method—thus proving their fertility with each conception—rather than risk the loss of fertility, the drying of the uterus, by taking the contraceptive pill. The pill is also viewed as problematic for spacing children because of its effect on nursing mothers. Women who have taken the pill when nursing claim it dries up their milk, as it does the uterus. Most nursing mothers refuse to try the pill and risk the loss of breast milk. Many mothers nurse their babies until they become pregnant again, although they claim that as long as they nurse they will not get pregnant. Most children are regularly nursed until the age of 18–30 months.

The popular focus on the uterus as the female's contribution to reproduction leads women to interpret the actions of these new contraceptive techniques in traditional terms. Without notions of ovaries or fallopian tubes as part of the female reproductive system, these beliefs about the effects of the pill on the uterus are logical.

*Side effects and "the pill": problems of blood, heart, and nerves*

The difficulties provincial Iranian women have with accepting the birth control pill are not limited to their fears of its effects on the uterus. Many women complain of side effects from the pill including aches in the joints (elbows and knees), heart palpitations, weak nerves, and short tempers. Physicians who attempt to cope with these complaints usually dismiss them as psychosomatic illnesses common to women whether they are using the pill or not. No verification of these side effects was made by physicians on Maragheh;

physical exams were only cursory. Whether these sensations of malaise felt by women are psychosomatic illnesses rather than "real" diseases is less interesting than why women sometimes see the pill as the cause of these disorders [22].

Women from all social groups in Maragheh believe that the pill causes polluted or "dirty" blood to remain in the body. Because the pill reduces the blood flow during monthly periods, women assume that some menstrual blood remains in their system. They believe that this surplus "dirty" blood, which was not discharged, circulates or goes around (*dolanar*) throughout the body, frequently settling in the joints, causing aches and pains. A typical comment on the effect of the pill and dirty blood was made by one woman who complained:

"Dirty blood is like a wind (*yel*) which goes throughout the body. It can strike your eyes—for instance I have a swelling from the pills on this side on my face—it's caused by dirty blood. My head aches from dirty blood, and it also goes to my heart. I know this to be so. The pills strike my heart and then my head. I also want to sleep a lot and this too comes from the circulation of dirty blood because of the pills."

For many women, the reduction of blood flow during menstruation that is caused by the pill is viewed as a sign of loss of fertility, of increasing age, and of loss of vitality, sexual potency and attractiveness. Women complain that the pill causes one's entire body to "dry up", that it hastens the onset of menopause and old age. One young university woman noted: "Women here say it is very bad for a woman to have reduced bleeding during one's menstrual period (due to the contraceptive pill) because she will get older faster and her face and hands will become like a man's".

For some women, the contraceptive pill also causes problems for their ritual purity. Spotting between monthly periods spoils one's state of ritual cleanliness, because menstrual blood is viewed as ritually polluting. It interferes with a woman's religious activity, for one must be ritually clean to pray (*namaz*), to enter a mosque, to fast during Ramadan. Sexual intercourse is also forbidden during menstruation, and spotting between periods may complicate sexual activities. However, the pill also has beneficial aspects. Women who do not suffer from spotting use the contraceptive pill to prevent menstruation during the Ramadan fast, thus eliminating the need to fast at a later time. The pill was also popular among several young women who went on the Haj pilgrimage to Mecca. They took the pill throughout their trip to prevent menstruation and thus ritual uncleanness. Women also attempt to use the contraceptive pill to induce abortions. It is not uncommon for women to take a month's supply in a day to bring on menstruation when they suspect they are pregnant with an unwanted child.

One of the most common set of complaints by pill users and potential users is that the pill causes heart palpitations, weakened nerves, hand tremors and short tempers. Women from all social classes in Maragheh and in the surrounding villages hold this belief. Their physiological models of how the heart and nerves are affected by the pill are often vague, but the belief that these disorders are directly linked to pill

use is extremely widespread. Of the hundreds of women observed attending family planning clinics in Maragheh and of others who used oral contraceptives, at least one quarter complained of heart palpitations and/or weakened nerves. The clinicians—the university trained midwives and the social workers, who had ninth grade to high school education—also believed that the pill could cause these side effects. However, they were also aware that these disorders were common illnesses of womanhood, that women often experienced them whether or not they were taking the contraceptive pill. Because they wanted to keep as many women as possible “on the pill”, they had difficulty responding to these complaints. In their best moods, they would occasionally prescribe a herbal sedative (*gul-i gavzaban*) for heart palpitations or a “heart tonic” for strength. They would also offer to exchange the pill prescription for a less potent one, or to take the patient off the pill if her “heart distress” was too great. These clinicians were taught by physicians that heart disease was a contraindication for pill use. The distinction between heart disease and heart distress (*narahatiye qalb*) was thus problematic. But even these clinicians’ models of the effect of pills on the body were structured by the common experiences and beliefs of provincial Iranian women. One of the university trained midwives commented, “What does the pill *do* to our bodies? I took it for 2 years. I could not stand the side effects. My hands trembled so that I could not work. It had heart palpitations and was extremely nervous. I cried a lot and became easily annoyed (*asabani*). I decided to have my tubes tied. The pills are really harmful to one’s nerves, to one’s body”. One of the traditional neighborhood midwives (*ev mama*) expressed a similar view: “I took the pill and became very short tempered; I fought with people around me all the time. I had trembling hands and my heart would stop and flutter. Everyone has that happen to them and so they stop taking the pill”.

The terms—heart distress, weakened nerves, and shortened tempers—appear to be a language of somatization for feelings of anxiety and ambivalence associated with contraception and sexual intercourse, fertility and infertility, and the stresses of female sexuality, of being a wife and mother, in Iranian society. Although these female disorders are often attributed to “the pill”, especially by pill takers and dropouts, other stresses of female roles such as sexual intercourse, pregnancy, childbirth, child rearing, interpersonal problems, social confinement, poverty, worry and grief are also considered causative. The following case illustrates the complexities of perceived causes of disorders such as heart distress and weak nerves.

#### Case II

Mrs F. was 27 years old when we first met her. She had 5 children ranging in age from 6 months to 12 years, 3 girls and 2 boys. Mrs F. lived with her husband (a stove craftsman in the bazaar) and her 5 children in one room of her husband’s father’s house. The other room was occupied by her husband’s mother, father, and 2 sisters. They all maintained a single kitchen. Their simple house was surrounded by a 15 foot brick wall that enclosed a small courtyard with a piped water supply. The house had electricity but no

water. The family income averaged about \$100 per month, plus a small income from Mrs F.’s sister-in-law, who worked as a seamstress. This family led a simple life, their income providing for sufficient food but little in the way of extras.

Mrs F. never attended school, could not read or write, and knew no Persian. She did not know how to count money and had to be accompanied by her husband or sister-in-law on those few occasions when she went to the market to shop. She did go out to visit her parents, who were poorer than her husband’s family, about once per week to clean their house for them. Other trips into the outside world were limited to rare wedding celebrations, a few religious mourning rituals, and an occasional trip to a doctor or a public health clinic. Thus Mrs F. passed nearly all of her days within the confines of her walled courtyard and home, surrounded by children and the women of her husband’s family.

From the time we knew her Mrs F. complained about heart distress. She fretted continuously about her weak condition, her lack of strength, paucity of blood, and the lack of meat on her bones. She complained of her heart palpitating, her nerves being upset, and the sensation of her heart being squeezed (*darukh*) and depressed. This continued for the 18 months that we knew her, without any significant change in her symptoms. She would complain to her husband, to others in the household, to neighbors, and to me. On one occasion she told me that she always felt like screaming out. She blamed this feeling on the fact that she was 27, already had five children, was stifled by narrow living quarters, and lived with her mother-in-law as the head of the household. She said, “I feel like screaming. But if you heard me you would be frightened, I would scream so loudly”. Her desire to scream out was released in a series of fights with her mother-in-law which occurred at least weekly, loud fights with shrill screaming and crying which sounded over the walls and into the street. The fact that these fights were heard was a source of great embarrassment, for a woman’s voice should not be heard outside of her courtyard, just as her face should not be seen beyond the intimacy of her home.

In an attempt to limit her family size, Mrs F. took birth control pills for a brief period (less than one month) at the urging of her more educated neighbors. But when she took the pill, she said, she had heart palpitations, shaking hands, and upset nerves, all symptoms that she had experienced before, but which she believed were exacerbated by the pill. Previous to taking the pill for contraceptive purposes, Mrs F. had once taken a whole month’s supply of contraceptive pills in an effort to abort her last child. She thus associated the pill with both abortion and prevention of pregnancy.

Mrs F. occasionally used herbal medicines for both her weakness and her heart distress. She also visited the doctor several times to complain of her weakness and heart problems and was given a Vitamin B tonic. She never received any lasting relief. Mrs F. blamed her illness on the fact that she had too many children, on her cramped living conditions, the poverty of her parents, the chronic illness of her younger brother (who had a rheumatic heart condition), on her past use of the contraceptive pill, and on the tension she

Table 1. Use of oral contraceptives: grouped by husband's occupation:  
Women in Maragheh Shahrestan, December, 1973

Oral contraception use	Town women					Village women	
	Professional, high civil servants (N = 57) (%)	Merchants high bazaar retailers (N = 26) (%)	Low civil servants (N = 49) (%)	Middle and low bazaar retailers (N = 107) (%)	Workers (N = 74) (%)	Peasant farmers (N = 154) (%)	Total (N = 467) (%)
Used pill at time of survey	39	19	41	37	16	17	27
Used pill in past (dropouts)	26	10	22	24	20	13	20
Never used pill	35	62	37	38	64	70	54

feels over her desire to avoid pregnancy while still satisfying her husband. The conditions continued, and so did her heart distress.

The implications of the beliefs presented above for sustained use of new contraceptive methods such as the pill are considerable. The extensive cultural associations between heart distress and female sexuality indicate that any method of contraception that affects the female will be regarded with ambivalence at best. This ambivalence is expressed by many women who wish to practice contraception, but who also are dissatisfied with contraceptive options. This dissatisfaction leads to erratic use of the pill and condom. Table 1 on use of the contraceptive pill shows that at the time of the survey, 32% of the town women and 17% of the village women reported that they were using the pill. However, in discussions with a subsample of pill users, it was found that many women alternated pill use with other methods, particularly withdrawal. Some failed to use alternatives.

Prolonged use of the pill is also not popular, and women's ambivalence is expressed in the high rate of dropouts; 42% of all town women who had ever used the pill had dropped out of the program at the time of the survey. Only 9.5% of town women who stopped using the pill did so because they desired another child. The vast majority of pill dropouts in this sample as well as those in the family planning clinic

discontinued the pill because of side effects—of heart palpitations, weak nerves, aches and pains, and the effects on menstruation. Over 84% of the pill dropouts in this survey had used the pill for less than 2 years; and only 36% of reported pill users had used it for more than two years (Table 2).

The ambivalence women feel about using the contraceptive pill, and its reputation as causing undesirable side effects often make it an unacceptable option for contraception or spacing childbirths. Although most women who desire to practice birth control are willing to try the pill, they do so in a milieu that is not always supportive. (The *R* correlation between pill use and peer use of the pill was only 0.26 for town women, see Table 3).

#### *Clinical communications and discrepancies in explanatory models*

Women who seek relief from physicians for the side effects of the contraceptive pill are almost always dismissed as hypochondriacal. Physicians, all of whom were men in Maragheh, neither elicit their patients' explanatory models of their illnesses, nor attempt to communicate their own model of female physiology and the functioning of the pill to these patients. Most dismiss their patients' complaints with abruptness, especially if the patients are of a lower social status. Male physicians also assume the popu-

Table 2. Reasons given by women for discontinuing use of oral contraceptives: grouped by husband's occupation

Women in Maragheh Shahrestan, December, 1973

Reasons	Town women			Village women	
	Professional and civil servant (N = 22) (%)	Merchants and bazaar retailers (N = 26) (%)	Workers (N = 15) (%)	Peasant farmers (N = 19) (%)	Total (N = 82) (%)
Pills cause illness (heart palpitations, weak nerves, harm uterus, etc.)	68	85	87	58	74
Became pregnant while using pill	18	8	7	21	13
Wanted to become pregnant	14	8	7	21	12

Table 3. Reasons given by women for not using oral contraceptives: grouped by husband's occupation  
Women in Maragheh Sharagheh Shahrestan, December, 1973

Reasons	Town women			Village women	
	Professional and civil servant (N = 20)	Merchants and bazaar retailers (N = 42)	Workers (N = 37)	Peasant farmers (N = 90)	Total (N = 189)
	%	%	%	%	%
Pills cause illness (heart palpitations, weak nerves, harm uterus, etc.)	20	26	14	9	15
Disapprove of contraception	10	2	14	12	10
Nursing infant	5	21	11	9	12
Currently pregnant or desire to become pregnant	40	35	38	23	31
Other (no knowledge, may use in future, no need)	25	14	24	47	33

lar notion that the stresses of female roles, poverty and too many children are the cause of what many refer to as imaginary illnesses. This type of attitude does not bode well for the delivery of sympathetic and sensitive care, and women often express their dissatisfaction and frustration with medical treatment. One might speculate about the impact simple educational programs on female physiology and the pill would have on popular models and therefore on the experience of illness, and on clinical interactions. It is rather ironic that the social workers who were in charge of the family planning clinics and mobile units in Maragheh were as uninformed in the biomedical model of female physiology as were the women they served. University trained midwives, while sometimes sympathetic to their patients' complaints, also offered no alternative physiological or even psychological model to make sense of the effects of the contraceptive pill on a woman's body.

Although this ethnographic data indicates that the relationship between a set of cultural beliefs about female physiology which are grounded in the Galenic-Islamic tradition of medicine, and fertility related attitudes and practices has significant implications for fertility behavior, and that it structures attitudes concerning contraceptive practices, the difficulty remains of evaluating the extent to which these beliefs explain population trends [23]. This type of cultural analysis in population studies may be more useful for explaining variations in behavior and attitudes in the short term. It may also contribute toward the development of family planning programs that are sensitive to the cultural concerns of the population to be served.

#### REFERENCES

1. This essay is based upon field research conducted during 1972-1974 in the town of Maragheh, East Azerbaijan, Iran, and on field research for the World Health Organization in a number of West Azerbaijan villages in the summers of 1975 and 1976. The field research
2. Although social and economic factors have been shown to be powerful explanatory variables for broad population trends, the role of cultural factors in influencing population trends is much more difficult to evaluate and assess. Part of this difficulty arises from the problem of measurement. Analyses of the role of religious beliefs or family norms have frequently reduced complex cognitive systems to measurable "attitudes" structured by KAP questionnaires. The difficulties posed by survey methodology have led to inadequate evaluation and understanding of the importance of such factors in fertility behavior. Perhaps one solution to the problem of evaluation is to employ ethnographic techniques in addition to survey methods to analyze how cultural factors structure fertility-related behavior and give meaning to it.
3. Among the Iranian women I studied, beliefs about female physiology were more powerful cultural explanations for fertility related behavior than religious attitudes. Religiosity appeared to have little impact on contraceptive attitudes and practices for most women in the survey sample; only 11% of town women and 14% of village women thought that contraceptive practices were sinful.
4. Justine McCabe who studied women in Lebanon, and Fatima Mernissi, who studied women's attitudes toward contraception and family planning programs in

was done jointly with Byron J. Good. The field work in Maragheh was supported by a Foreign Area Fellowship and by the Pathfinder Fund of Boston, Massachusetts. Research methodologies used in Maragheh included participant observation of town institutions (especially health care settings), numerous in-depth interviews with several hundred informants that focused in part on health and fertility issues, observation of government family planning clinics and mobile units, brief interviews with family planning clinic patients, review of clinic statistics, and a major health and fertility survey. In the survey a total of 771 married women and men of child bearing age were interviewed in the town and in three villages in the subprovince district of Maragheh. A modified stratified sampling design was used to ensure a representative cross section of the population. The tables in this article analyze the response of the town women (N = 313) and village women (N = 154).



- Morocco, found that women in these societies felt that oral contraceptives affected their hearts (heart palpitations) and nerves. Personal communications. See also Gulick J. and Gulick M. E. Family structures and adaptations in the Iranian city of Isfahan. In *Women's Status and Fertility in the Muslim World* (Edited by Allman J.), p. 184. Praeger, New York, 1978.
5. Good Byron J. The heart of what's the matter: The structure of medical discourse in a provincial Iranian town. Ph.D. dissertation, Department of Anthropology, The University of Chicago, 1977.
  6. Members of the same family will often comment that, "We don't eat this type of food; it gives our bodies harm: our natures are hot/cold," etc. Thus natural temperament, for some individuals, is understood as a general physiological state shared by all family members regardless of sex, age, or state of health. In addition, individual family members may have idiosyncratic physiological temperaments—a kind of sub-type within the family type.
  7. Galen, *On the Usefulness of the Parts of the Body* (translated by May M. T.), p. 268. Cornell Univ. Press, Ithaca, New York, 1968.
  8. Galen, *On the Usefulness of the Parts of the Body* (translated by May M. T.), pp. 624, 621–630. Cornell Univ. Press, Ithaca, New York, 1968.
  9. Good Byron J. The heart of what's the matter: The structure of medical discourse in a provincial Iranian town, p. 189. Ph.D. dissertation, Department of Anthropology, The University of Chicago, 1977.
  10. The amusing series of Rashti jokes Iranians love to tell play upon the effects of climate on sexual temperament. Rashti women (from the Caspian seacoast) are reputed to have voracious sexual appetites because of the damp climate. Their husbands, however, are reputed to be sexually impotent much of the time, and cuckolds.
  11. Galen, *On the Usefulness of the Parts of the Body* (translated by May M. T.), p. 620. Cornell Univ. Press, Ithaca, New York, 1968.
  12. Gruner O. C. *The Canon of Medicine in Avicenna*, p. 87. Luzac, London, 1930.
  13. Galen, *On the Usefulness of the Parts of the Body* (translated by May M. T.), p. 634. Cornell Univ. Press, Ithaca, New York, 1968.
  14. Galen, *On the Usefulness of the Parts of the Body* (translated by May M. T.), p. 623. Cornell Univ. Press, Ithaca, New York, 1968.
  15. Galen, *On the Usefulness of the Parts of the Body* (translated by May M. T.), p. 636. Cornell Univ. Press, Ithaca, New York, 1968.
  16. Galen, *On the Usefulness of the Parts of the Body* (translated by May M. T.), pp. 638–639. Cornell Univ. Press, Ithaca, New York, 1968.
  17. Elgood C. *Tibb-ul Nabbi or Medicine of the Prophet: Being a Translation of Two Works of the Same Name*, p. 152, 165–172. Osims, 1962.
  18. Good B. J. The heart of what's the matter: The semantics of illness in Iran. *Cult. Med. Psychiat.* 1, 36, 1977.
  19. Good B. J. The heart of what's the matter: The semantics of illness in Iran. *Cult. Med. Psychiat.* 1, 25, 1977, for an extensive analysis of heart distress as a semantic network.
  20. In 1966, the Iranian National Census reported that 78% of women over 15 years of age and 60% of household heads were illiterate in the town of Maragheh. *National Census of Population and Housing: Maragheh Shahrestan*, Vol. XLVI, p. 22, 122. Iranian Statistical Center, Tehran, 1967. Of our sample surveyed in November–December, 1973, 45% of the town women and 62% of the town men were literate; 29% of village men but only 2% of village women were literate.
  21. Of all my young female acquaintances, only two used a contraceptive method for the first year of marriage. They were students and became pregnant shortly after the first year of marriage.
  22. Other perceived causes of these "cultural disorders" are found in Good B. J. The heart of what's the matter: The semantics of illness in Iran. *Cult. Med. Psychiat.* 1, 40, 1977.
  23. In regression analysis of our survey data on town men and women we found that next to age, years of education was the strongest explanatory variable (SES linear measures) for total live children and ideal number of children. The cultural beliefs presented above cannot be used in this type of analysis, but the significance of education rather than income for birth rates suggests that cultural beliefs are relevant variables for understanding birth trends.

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## ASRAMA: AN ISLAMIC PSYCHIATRIC INSTITUTION IN WEST JAVA

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**Abstract**—In Islamic societies, medicine is an integrated part of religious tradition. Originating from Greek Humoral Therapy and based on Arabic Prophetic Medicine, the medical tradition of the Moslem Sundanese in Indonesia is coherently organized according to a set medical belief. For them, illness is not only a physiological disorder caused by humoral imbalance but also a moral and religious disorder stemming from the patient's inadequate religious faith. Treatment of illness will therefore be directed towards a restoration of both physiological and religious order in the patient. This paper discusses the therapeutic process of the Moslem Sundanese psychiatry and examines by means of a symbolic analysis its internal logical organizations.

### INTRODUCTION

The Sundanese in Priangan districts of West Java share many cultural similarities with the neighboring Javanese of East and Central Java, but their orientation towards Islam has been said to be more orthodox than their ethnic neighbors. In 1972 I went to Indonesia to study this aspect of the Sundanese culture, and in the process came across a number of curious phenomena which drew my attention to the question of Islam and mental illness [1]. It all began with my first encounter with a resident mad man called Asep.

Asep was probably in his early forties at the time, and except for his unusually well-built stature, he looked quite ordinary when I first met him as I toured around the village of 350 residents: he greeted us gracefully, showed his respect to the accompanying village head, and led us towards his neighborhood like a gracious host. Neither did the people around him show any sign of warning about what was to follow soon afterwards. As we all sat down for a cup of tea, a loud noise from outside the house suddenly interrupted our conversations. There I saw Asep standing on a chair, waving his arms and shouting towards *madrasah* building where a religious gathering was underway. Not the least bit affected by the extraordinary sight, my companion advised me belatedly not to mind the wild man's behavior, for "Asep had been deranged for at least the past 10 years". Later on, Asep startled me even further by suddenly jumping into the building with a loud cry, from one of the windows, to pose himself standing before my camera. The amused villagers pulled him down teasing him but seemed little disturbed by his presence.

For the following weeks, Asep remained conspicuous in the otherwise orderly village life: dressed in a khaki uniform, he was seen begging food and tea from the neighbors, trailing along with the village children, or delivering sermons outside the village mosque. In the evening, he dropped by to join my hosts and their guests who had gathered to spend the day's last hours relaxing and waiting for the final prayer-call. On such occasions, Asep appeared gentle, listening to our conversations and sometimes making sensible comments on religious matters. It was evident, however, that

although the residents remained remarkably tolerant, his unpredictable moods and actions made them somewhat uneasy.

Soon afterwards, I learned that Asep was not the only person afflicted with behavior disorder. One morning I was awakened by a pathetic cry and shouts from outside my windows. One of the elderly women in the neighborhood was squatting on the ground throwing stones and obscene words at her grandchildren. Perhaps having been accustomed to the scene, which she recreated several times during the year I was there, nobody seemed very upset. Her family and neighbors left her alone and carried on with their business as if the event was no more significant than a child throwing a temper tantrum.

I also noticed that a middle-aged woman on the other side of my neighborhood was always singing songs, a habit generally considered childish and self-indulgent. Pressed by my questioning, the villagers told me that in total 8 villagers were afflicted with behavior disorder. Some of them suffered from what they called brain damage (*rusak kepala*), evidently resulting from violent accidents. Two elderly women who never spoke a word and lived alone were described as being senile (*tertua*). I gathered, from the descriptions the villagers provided, that another young woman whom I never saw during the year suffered from a disorder which in Western psychiatry might be classified as catatonic. Except for this patient, the rest were capable of leading their lives with the help of the families. The villagers also told me that one place where such patients could be treated is an Islamic mental clinic referred to as *asrama*. In this paper, I will report my observations of the clinic and discuss the nature of its treatment practices. Although the total length of time I spent at *asrama* amounted to no more than a few days, it is hoped that this report will draw some attention to the indigenous psychiatric tradition seldom reported from Southeast Asia [2].

### ASRAMA

We left the village one early morning, accompanied by several men and equipped with a rifle wrapped in a muslin sheet supposedly to protect ourselves along

the way. We rode a jeep to the town nearest to *asrama* and then transferred to a horse buggy which took us through the terraced rice fields along a narrow dirt road. After 20 min or so down the hill, we came to a river bank where a bamboo raft, tied to a thick wire suspended between the banks, was waiting for us to cross the turbulent river stream. From there we hiked up the hill passing bamboo forests and curious onlookers until we were welcomed by the hollow sounds of sobbing cries and singing voices echoing through the valley.

The *asrama* was located along a gently sloping hillside above a small village compound. Protected by tall fruit trees and a small hill behind it, and bathed in the morning sun, the wooden building complex stretching from east to west was enshrouded by a peaceful atmosphere. Instead of a fence, a playground and a small pond with an enclosed toilet at one corner separated the complex from the village compound. To my surprise, Kiai Hadum, the renowned healer who greeted us at the entrance looked more like a traditional religious functionary devoted to other-worldly activities than the charismatic curer I had envisioned [3]. Short and chubby, he wore a white Moslem hat distinguishing himself from those Moslems who have not yet made pilgrimage to Mecca, and was clad in a traditional Malay shirt and a matching *sarong* wrapped around his lower half. He walked briskly in small steps, and spoke an archaic form of the Sundanese language like an old conservative man of religious learning.

What impressed me most about the inside appearance was its neatness. The large reception room was dominated by the white plastered walls along which rows of chairs were neatly lined up. On several of these walls, simple Arabic inscriptions were written in large letters. Evidently, the room was used as a dining room as well as for meetings. Right next to the reception room was a small sunroom where several male patients stood before the closed glass windows sunbathing. Behind it was a large kitchen where the women were busy preparing meals or sitting quietly near the windows. The patients' ward or dormitory with fourteen rooms was located on the eastern wing of the complex. Several rooms were large enough to accommodate a number of patients, and the wooden floors were covered with large straw mats upon which the patients slept and kept their bundles of personal belongings. Single rooms were smaller and furnished with a bed along the barred windows kept open during the daytime.

Kiai Hadum learned the curing art from his own father who had also been a religious figure. In general, however, the knowledge of curing is passed down from master-*ulama* (religious teacher) to apprentice-*santri* students of Islamic educational institutions as one of the skills necessary to function as religious leaders and patrons of rural communities. Originally, though, both medicine and a Malay martial art, called *pentjak silat*, used to be an important practical knowledge for the aspiring *santri* students and missionary *ulama* who in the old days travelled long distances from one region to another seeking knowledge from renowned masters of Islamic sciences or recruiting followers to the new faith in Java's hinterlands. Once settled in the community, these skills also became

handy for legitimising the *ulama's* authority as local patrons against the secular authorities, bandits and social crisis.

Despite the wide-spread knowledge of medicine among the *ulama*, an institutionalized clinic such as this one is a rare phenomenon. Most contemporary *ulama* practice medicine only for the family, villagers, and patron-friends who are directly relevant to the long-term political objectives of the *ulama*-families. This is because, Islam having never developed a centralized church-like institution, most *ulama* are independent, and their authority limited to parochial localities. Their public services are supported privately by the families to expand their name and influence beyond the limit of the village boundary. But the majority of the *ulama* are landed middle-class farmers with limited resources, and for additional resources they must rely upon their political and religious allies in the race for influence. In general these allies are made up of the kinsmen, villagers, former *santri* students, and wealthy patron-friends. To them the *ulama* are eager to extend any assistance including medical help. To offer the same kind of services to total strangers, however, is not feasible unless the family's financial and human resources are plenty. For the same reasons, Islamic voluntary associations serve to promote the political interest of the collectivity of the *ulama* against the secular authorities, political groups, and the vying modernist Islamic factions rather than to meet the need of the Moslem followers at large.

The *kiai's asrama* was built in 1952 despite such handicaps. He had been practicing medicine for decades, and he was able to devote himself in the practice because he had a number of brothers, nephews and sons who took care of the family's *pesantren* Islamic educational institution. Every available resource was mobilized for the project: his family pooled its funds with those of their wealthy patrons, while the *santri* students and the villagers contributed labor. Participants of such good-will projects are usually motivated for gaining religious merits or for paying off their social and moral debts to the *ulama* families. They also knew that Kiai Hadum was faced with an urgent need to expand his clinic because of the radical increase in the number of patients resulting from the social disturbance caused by the Dar ul-Islam terrorism and the political instability of the newly independent government in the early 1950's [4].

At the time of our visit, 44 patients—31 male and 13 female—were enrolled for treatment. Two thirds of them were young adults between the ages of 18 and 35, and a few were Javanese and Chinese. The *kiai* felt that the political and economic instability in society had much to do with the high frequency of mental illness incidents among certain groups of the population. Between 1965 and 1970, when the rural communities were seized by the threat of a massacre following the abortive Communist coup of 1965, for instance, the number of patients reached the maximum capacity of the institution. The majority of them were young and old women from rural areas stricken with an acute grief or a fear of imminent death in the family. Since 1970 about the time the political crisis had subsided, the trend had reversed itself, and the

patients had been mostly urban males suffering anxiety from financial and social pressures [5].

As we were carrying on with our discussions, a woman with a young boy walked in. They were quickly led to a corner where they waited until the *kiai* finally excused himself from our party to join the couple. While the mother kept sobbing, making a plea for help, the boy remained stiff with his head bent forward and his eyes focussed on the floor. Our discussion proceeded with the young assistants.

The majority of the patients arriving almost daily are evidently in a manic state, as other observers of mental hospitals in Indonesia have reported [6]. This however is not surprising, considering the fact that the nondisruptive and depressive cases are not even considered as being mental illness (*sakit kepala*, illness of the head) but as emotional illness (*sakit jiwa*, illness of the heart) and that the patients are generally tolerated and treated at home by the local *ulama* or native healers (*dukun*). Some arriving patients are tied to a stretcher, while others are restrained by half a dozen adult males. Soon after they enter the building, the patient is freed for the therapist to observe the patient's behavior. Then a preliminary interview is conducted with the patient's family in order to identify the nature of disorder and determine whether the patient should be admitted.

The main questions which concern the therapist are related to the episode regarding the onset of the patient's disorder, his medical and life history, and whether anyone else in the family has also suffered from the same disorder. From the information provided by the family, the therapist makes a judgement as to whether the disorder is organic or genetic in origin, and acute or chronic in nature. If the disorder is thought related to such extraordinary diseases as polio or malaria or to a violent accident which the patient has suffered prior to the onset of disorder, then the diagnosis would be determined organic. If the patient is born with the disorder, or if he is not the first in the family to suffer, the case would be thought genetic in origin. On the other hand, if the patient had begun acting abnormally only after an extremely difficult or traumatic experience (i.e. loss of loved ones, or socioeconomic crisis), the case would be considered acute in nature. Both organic and genetic disorders are believed incurable, and hence the patients are denied admission in favor of acute patients.

Among the disorders rejected admission are those which might be referred to in the Western psychiatry as autism, mental retardation, and chronic psychosis [7]. The admission policy against chronic patients was justified in terms of the shortage of facilities and the small size of the staff (three *santri* students and two sons), but it was also referred to their experience whereby acute/manic patients tend to recover sooner and with a high cure rate than chronic patients. Unlike the Western psychiatry, however, the diagnostic system of Islamic psychiatry is generalized and does not go beyond acute/chronic and organic/non-organic distinctions.

Having comforted the mother and her son, the *kiai* gave them some advice and reluctantly sent them

home. The young boy, he said, was too young for treatment at the clinic but should be cared for at home by a local specialist. Then the *kiai* related to us stories of several young men he had treated previously, and concluded that the high frequency of mental illness among the young people is related to the fact that they tend to set themselves up for unrealistic goals which are too demanding for their limited patience and mental-spiritual strength [8]. To show us some concrete cases, the *kiai* selected two young men from a group of patients sunbathing in the adjoining room.

The first man, perhaps in his early thirties, talked about his experience in a reflective mood. He had been the son of a well-known charismatic religious leader, and himself a practicing *ulama*, when his father suddenly died and left him with the responsibility of the family's *pesantren* school. Overwhelmed by the prospect and struck by an acute anxiety, he resorted to Sufi mystical training to enhance his faith and spiritual power. But the outcome of the rigorous training—involving deprivation of sleep, food and other comforts—turned out to be more than what he had bargained for: his conspicuous public behavior drew the attention of the police, and he was arrested and put in jail on a charge of being a Communist sympathizer. Evidently, the harsh treatment in jail was too much for him to bear. He began hallucinating and talked nonsense at which point he was released and sent to a mental hospital outside Bogor [9]. After 2 months of unsuccessful treatment, he was subsequently brought to *asrama* where he had spent the last 6 weeks recovering steadily.

The other fellow, also in his thirties, had been in *asrama* only for a few weeks and appeared far from being well. From his inarticulate expressions and incoherent and repetitive motions, the story emerged as follows: he had been a university math student for the past 10 years and had no job when he met a woman he wanted to marry. His parents however disapproved his plans for marriage because of the woman's inferior social status and bought him instead a brand new motorcycle. The woman then moved away to marry an elderly man. Profoundly disturbed by the situation, he wandered about asking anyone he met, "What could you do when your parents prefer to give you a motorcycle than the women you love?" In a year or so, he was brought to *asrama*. As he recounted the episode over and over, he became extremely agitated until the *kiai* calmed him down in a comforting soft voice and changed the topic of our discussions. The emotional stress (*tekanan jiwa*) typical to the women patients, the *kiai* noted, is usually caused by a loss of loved ones either because of divorce or a high frequency of infant mortality.

As if to share the patient's difficult life experiences, the *kiai*'s attitudes towards the patients were very compassionate and paternalistic. He referred to them as his children (*anak anak*), and frequently nodded his head listening to the patients. His paternalistic charisma, expressed in the tone of the voice and demeanor, nonetheless belied the intelligence and vigor with which the treatment was carried out. For the remaining pages, I will concentrate my discussions on the treatment processes.



## ISLAMIC PSYCHIATRY

For the Moslem Sundanese, religion and medicine are inseparable. Illness manifests a biophysical disorder of the body where the hot and cold substance (*zat*) are in a state of imbalance. But this imbalance is merely a symptom of a far more serious disorder, the patient's inadequate state of grace before God. A recovery from illness thus takes medical as well as religious efforts. I will briefly explain this underlying cultural theory of illness. We shall begin with the Sundanese world-views.

The phenomenal world the Moslem Sundanese perceive and experience daily is an active universe in which two polarizing forces are in a constant conflict causing a tension and friction. These forces originate from God (*Tuhan*) at one end of the polarization and from Satan (*Iblis*) at the other. Both entities are felt to be real and their forces ineradicable, but they have opposing qualifications: God is inherently good, almighty, and constructive, restoring order in the universe. For man, God is Culture, the knowledge that can be attained only through learning. Satan, on the other hand, represents Nature, and its power is limited to this world and until the Doomsday: born out of fire, Satan is evil, hot and destructive.

The forces of God and Satan prevail in the universe affecting the lives of all creatures including man and lesser supernatural entities. In man, God exists as the knowledge stored in the mind (*akal*), whereas Satan as the lustful desires of the flesh (*jasad*). As God and Satan are diametrically opposed, so are the mind and the flesh.

Finally, these opposing forces come to manifest themselves as two opposing desires (*nafsu*) at heart. Some desires, stemming from the knowledge stored in the mind, are referred to as good and cold *nafsu*: by following the teachings of Prophet Mohammad, the cold *nafsu* wishes to serve God and realize his commands. Other human desires, on the other hand, are called evil and hot *nafsu*, for they originate in the lustful drives of the flesh: by befriending Satan, the hot *nafsu* seeks to satisfy man's indiscriminate drives for pleasure [10]. The heart, where the struggle between these two *nafsu* continues, is then defined as a battleground or a mediating ground for God and Satan, the mind and the flesh, the good and evil, and the hot and cold. The underlying structural concept which polarizes the opposing forces may be seen as a Nature-Culture opposition shown in the diagram Fig. 1 [11]. Nature prevails regardless of Culture: it can only be contained with the help of Culture.

The heart's inner movement is felt and measured like the atmospheric activities. Like the climate of atmosphere, the heart's climate (*hawa nafsu*) changes with a rise and fall in the felt temperature influencing the general state of one's welfare. If the mind is sound, it can recall God's words and strengthen the good

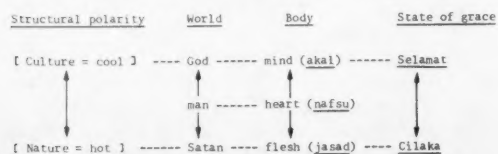


Fig. 1. Man and the general order of existence.

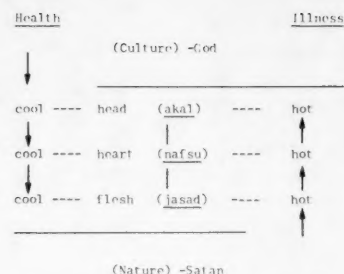


Fig. 2. Conditions of health and illness.

*nafsu* to overcome Satan's temptations and control the drives of the flesh. For the time being, the heart's climate remains pleasantly cool, and the person is blessed with a state of well-being (*selamat*) prevailing in his health, prosperity and prospect for salvation. When the heart's temperature rises and the good *nafsu* is overwhelmed by Satan and the flesh, due to a lack of faith and the confused state of mind, God will withdraw his blessing, and a state of damnation (*cilaka*) will result. Illness is therefore taken as a kind of God's punishment upon the sinner; the victim is morally responsible for his pain and suffering.

The resulting illness is seen as a physiological disorder caused by the "excessive heat" which the patient has absorbed from Satan for having come under its immediate influence [12]. The heat emanating from Satan rises, whereas the coolness deriving from God descends, and where these forces collide is the location of illness. With mental illness, the process is explained as follows: the excessive heat of the flesh boils the blood and blocks the major nerve vessels leading to the brain with the contaminated blood (*darah kotor*). This will cause a lack of fresh blood circulation in the head, thereby overheating the mind and disrupting its function to recall God's words and wisdom. Deprived of knowledge, the victim is no longer able to ward off spirits [13]. Mental illness is thus described as a state of mind loss (*hilang akal*) caused by spirit possession [14]. A mad man's manic behavior and his foul language are seen as manifestations of this state of spirit possession [15]. The patient no longer possesses Culture and has regressed to Nature like an unenculturated infant (Fig. 2).

Following this logic, Islamic psychiatry aims to restore a hot/cold balance in the patient by reducing the excessive heat and to restore Culture by means of re-enculturation. Although the concise manner of application is distinctly Sundanese, the dual nature of etiology and treatment reflects the fundamental notions derived from two Islamic medical traditions: prophetic medicine and Yunani humoral therapy. The prophetic medicine seeks the cause of illness and treatment in the patient's state of grace, while Yunani therapy stresses a humoral balance. The relationship between the two theories is shown in Fig. 3 [16].

Soon after the patient is admitted, his family is sent home. During the remaining treatment period until the patient is about to finish, the family is not allowed to visit *asrama*. This may range between one and several months after admission. Soon afterwards, the new patient will receive a glass of ritually prepared water: both the water and the sacred words the *kiai*

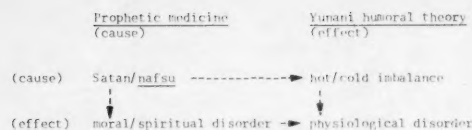


Fig. 3. Etiology of illness.

reads into it serve as "cooling" agents [17]. Shortly thereafter, the patient is led to one of the two large pools located in the back of *asrama* to take a cold bath with other patients. The length of time each patient wants to stay in the pool indicates the level of his recovery: the shorter it is, the further he has come along towards recovery. No patient, however, is permitted to spend any more than 1 hr, for it might create a counter effect—a recovering patient should take no more than 10 min before beginning to feel "too cold". After the bath, the new patient is immediately put to bed to warm up the chilled body, while others are given a glass of hot water to counter-balance the effects of bathing. Bathing is repeated the next morning, followed by a period of sunbathing. The alternating hot and cold treatment is believed to prompt a relaxation in the nerve muscles. The same function is served by massage treatment. (See Appendix for daily timetable.)

Massage is given every other day (once at 9 o'clock in the morning and again at 4 in the afternoon). First, a cool herb ointment is applied along the main nerves and veins to cool and prepare the patient for massage. Then massage begins with the extreme ends of the limbs continuing towards the heart and on to the neck and the head. The finger movement is always directed towards the head, the direction to which massage is aimed to stimulate the flow of fresh blood circulation.

Sometimes, the massage session turns into a scene of a violent verbal exchange between the patient and the doctor, who applies finger pressure to the area where the patient reacts in extreme pain—usually under the arms or the side of the neck. Obviously in great pain, the patient impersonating the voice of the spirit cries out to enlist other spirit forces. The doctor then demands with his religious authority for the spirit's identity—its name, the place of origin, and the reasons for possessing the patient. Having identified the alien intruder, the doctor then scolds and swears at the spirit in a foul language until the patient (spirit) asks for pardons crying out aloud "Ampun, ampun, ampun". Through this confrontation, the blame of illness is fixed upon the supernatural agent whereby the patient is allowed to act out his pain as a victim and the doctor to emerge as a gallant protector and ally in the combat against the inflictor.

With the patient being exhausted, the doctor gradually lifts the finger pressure ending with a gentle rubbing. The treatment takes about 1 hr, and the period of time decreases as the patient begins to recover.

The beginning of the healing process is marked by the patient being able to sleep soundly for the first time. For the first few days, the new patient must fast entirely except for water lest the spirit forces regain strength and disturb his sleep. Afterwards, the amount of food is gradually increased. The time of meal, the amount of food and even the content of diet are all

controlled according to the stage of recovery. In general, however, the patient's diet consists of easily digestible food items, locally classified as "cool" food. They include, among others, crushed avocado and non-fibery vegetables such as eggplant and potatoes, sometimes supplemented by small pieces of fish and chicken. In the meantime, hot food such as fibrous tubers, hard-to-digest corn, tough meat (goat and buffalo meat in particular), beans and other stimulating and odorous fruits and vegetables are excluded. All the food is cooked and boiled in a stew with a small amount of salt. Spices which make up the essential Sundanese culinary art is almost entirely avoided. The vegetarian diet and the small amount of food are believed instrumental to eliminating contaminated blood that blocks the nerve to the brain, while the avoidance of stimulating food and spices will reduce hypertension and the internal heat. Vitamin pills and other modern medicine may be added to the regular diet to restore nutritional balance and remedy internal parasites.

The "cooling" process continues with a longer period of sleep. Isolated from the rest, the new patient spends much of his time sleeping in a cell-like single room. The windows are closed during the sunset hours, and no lamp is provided to the new patient, because the yellowish light is feared to activate the possessing spirit disturbing the patient's sleep. At night, the rooms are locked, and the assistants take turns to go around and check the patients every 2 or 3 hr. Only after 1 or 2 weeks, when the patient no longer suffers pain from massage, and the period of his stay in the pool shortens, the patient is recognized for the first time free of spirits and ready to complete the first half of the treatment. Now that the symptoms are held under control, the treatment will focus on the cause. To mark the shift, the patient moves from his single room to a room shared by two other inmates.

Although the articulated aim of the first half of the treatment is to restore hot and cold balance in the body, there seems to be an underlying meaning quite separate from the overt purposes. This may be discovered by examining the symbolic aspects of the treatment. Beginning with the pool of water in which the patient takes a bath and the dark lightless room in which he spends hours sleeping without any food, they seem to symbolize fetalization, rebirth and the beginning of a new life. Like a fetus in a uterus, the patient is "contained" within a bounded universe. Then like a newly born baby, which, incidentally is considered to be the epitome of hot creatures, the patient's meal time, the amount and content of food are all carefully monitored. Like an infant, the patient's eyes can see, but what he sees makes little sense, having not yet acquired knowledge, the essence of Culture. The treatment which follows the first segments, therefore, can be seen as a process of socialization. This is attested by the patient moving into a shared room.

The second half, referred to as the treatment of the heart and the mind, aims to "cool" and stabilize the vital elements by restoring Culture in the patient. Three interdependent methods are used: counseling, work therapy, and religious training. It begins with the face-to-face counseling which takes various forms and occurs on different occasions. The way the thera-

pist and the patient meet may be accidental or planned in advance. They may be working in the rice-field when the therapist approaches the patient making casual remarks on the landscape and the nature of work in reference to man's relationship with God. Gradually, as the patient becomes accustomed to interactions with the *kiai*, questions such as the patient's family and the episode of his breakdown are brought up to allow the patient to express himself. Such encounters may take place during sunbathing hours or in the late afternoon when the patient is relaxed doing some simple tasks or reciting 99 names of God. Some patients with difficulty in communication, may resort to non-verbal means such as drawing, acting or writing.

In the counseling process, the *kiai* emerges as a significant father figure before the patient. At first, he assumes the role of a listener while the patient, unaware of the *kiai*'s religious authority, continues to repeat the episode of his breakdown usually blaming the situation of the traumatic experience he had to undergo. After the same story is repeated several times, the *kiai* begins to direct the patient to focus on the problems of his values and expectations by suggesting different perspectives to evaluate the episode.

The counseling techniques somewhat resemble Western psychotherapy: instead of forcing change, the therapy is aimed at guiding the patient to self-realize (*mengakui sendiri*) his limitations, the nature of social reality, and the cause of inner tensions. The difference between the Western psychotherapy and the Islamic one, however, emerges not so much in the technique or underlying philosophy, but in the kind of values and aspects of reality being stressed as necessary and adaptive orientations to life: for example, instead of self-assertiveness or self-fulfillment, they stress the values of making a balance: moderation (*kesedangan*), patience (*kesabaran*), and harmony (*keseimbangan*) with the social universe. These values are held as necessary requirements for keeping "cool" despite the difficulty of life's experiences. High expectations and personal ambitions are discouraged in favor of adjusting oneself to the demands of social realities: such desires are only driven by the hot *nafsu*. Though these values are generally held as orientations to securing safety, they do not agree with the underlying cultural values peculiarly held by the Moslem men: free-will and autonomy [18]. It may be seen that the counseling specifically aims to turn away the patient from such masculine cultural ideals, which the patient has obviously failed, and direct him instead towards the mediocrity of social conformism. This attempt is carried out further through work therapy.

Work therapy, referred to as *percobaan* (try out) is designed for the patient to rediscover through experience his self-worth in terms of the contributions he makes to the community. Each patient is given an assignment usually related to his former occupation: an ex-farmer with farm work, a former office clerk with paper work, a petty trader with shopping in the local market and so forth. The women are assigned to cooking and domestic chores. Patients without any skill are taught new skills. The work therapy seems to emphasize the meaning of work as the individual's role in the *ummat* Islamic community rather than as a means of fulfilling personal goals. The work therapy is

also used as a means of reminding the patient of the world outside the community and as a guide to regain his lost memory. One young Chinese fellow, for example, had suffered a traumatic experience when his father's shop was attacked by a mob of students in the 1965 riot in Bandung. When I met him at *asrama*, he was still unable to speak and had to write notes to communicate with the villagers who brought bicycles for him to repair, but his fear of strangers was evidently fading away as he came into contact with the outside world in a greater frequency.

Above all, however, religion is the ultimate means of "cooling" the patient's heart and the mind. Regaining faith restores his proper relationships to God, helping him build a firm moral and religious foundation that cannot be easily affected by Satan's temptations and the drives of the flesh. Patients without any previous religious training attend local classes held for the children or join adult Koran reading groups which meet in the evening. Non-Moslem patients attend church or temple of their own choice. Some of them, however, become converted to Islam after a long stay at *asrama*.

By then, most of the restrictions are lifted from the patient, who now shares a much larger room with 4 or 5 others. He takes a bath in a regular fashion, attends religious gatherings with other villagers, and sometimes spends the night sleeping in *madrasah* with the *santri* students. He may even take part in the village patrol during the early evening. Nonetheless, the patient's activities continue to be monitored, and he still has to go to bed by a certain hour and take a two-and-a-half hour nap in the afternoon.

From counseling and work therapy to religious training, this second half of the treatment marks a gradual shift in the patient's exposure to the outside world. Like a young child, the patient learns cultural values and ideas about rights and duties associated with social roles in family and community. Then like a young adult, the learned knowledge is put into practice through the process of learning a means of livelihood and performing social services to the community. Finally, through the religious training, the patient acquires the ultimate knowledge about God and the universe. The process of socialization is completed through marriage and having a family of his own. The time has come for the patient to be reincorporated back into society.

Only towards the end of work therapy is the family invited for the first time to have a number of sessions with the therapist. These sessions are designed to communicate to the family about the patient's progress and the nature of his problems which had led him to a breakdown. These sessions can be seen as a way of bridging the gap between the patient and the family and society. But at this stage, the family is not yet allowed to meet the patient, for this transition process is handled with utmost caution and sensitivity.

Sometime after several such sessions, the spouse is invited to see the patient for the first time under the careful observation of the therapist. If the patient reacts strongly and shows an extreme discomfort, the meeting is halted and postponed further until the patient is ready for another try. If the meeting goes well, then the spouse is invited to stay overnight with

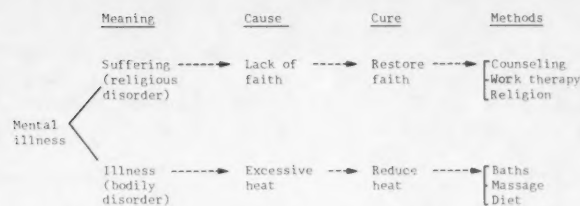


Fig. 4. Meaning-action system of mental illness treatment.

the patient in a room specifically reserved for that purpose. Like a young adult getting married and making a family of his own, the patient having consummated "marriage" is encouraged to visit home. At this time, however, the patient must return to *asrama* by the end of the next day. Only after several of these temporary visits, and when the patient wishes to return home permanently, he is finally released from *asrama*. For the next few months or so, the family continues to keep in touch with the therapist, reporting the patient's progress in the process of readjustment. Should any relapse occur, he may be readmitted for further treatment.

#### SUMMARY AND CONCLUSION

I have discussed above that the Islamic psychiatric treatment is logically constructed following the cultural ideology of mental illness. Illness is conceived of as originating in the patient's lack of grace and resulting in the imbalance of the hot and cold substance in the body. Fig. 4 summarizes this system of thought in relation to the healing process.

I have also pointed out that the underlying meaning of the process is to restore in the patient the knowledge of Culture through the means of resocialization: illness is a phenomenon which occurs in the absence of Culture and by the patient's falling from grace into Nature where Satan predominates. The sequence of treatment programs can thus be seen as a process of rebirth and resocialization (Fig. 5).

Despite the communalistic nature of the institution, the healing process focusses on the individual patient rather than a group. It is particularly so with the male patients. Each patient's progress is carefully supervised according to a set prescription specifying each stage of recovery. The patient's family is almost entirely excluded from participating in the healing process, and even the therapeutic community does not play a major supportive role. The community exists as a stage and a concept—a micro-model of Islamic communalism (*ummat*)—rather than as a corporate

group. Moslem brotherhood is exercised only when the men come to pray 5 times daily, and particularly because of the local matrilocal residence practices, the horizontal ties among the village males who marry into the wives' villages is extremely formal and weak. Reflecting such a reality and enhanced by the cultural values for masculinity, a Moslem man is a lonely seeker of inner power and knowledge. Amid the virtual absence of horizontal ties, the most striking relationship which emerges is the *kiai's* diadic ties with the individual patient. The role relationship quite effectively exploited in the healing process in fact takes after a model of father-son relationship through which, perhaps as the single most important tie in Moslem society, the religion and the masculine cultural values are transmitted. The model is ultimately projected onto the Moslem men's relationship with God, the source of power and knowledge.

Segregated from the men's quarters, the women patients' situation is somewhat different. Perhaps because their daily activities focus around the kitchen requiring a close cooperation among the women folks and because they are accustomed to supporting one another due to the Sundanese matrilocal residence practices, a greater frequency of interaction and group support exists among the women than among the men. Unlike the men, the women are encouraged to find pleasure and comfort in motherhood and domesticity, and although a development of mental strength necessary to endure life's difficulties is stressed by means of religious faith, the women are largely free of spiritualism that is demanded of the men. Such corporate tasks are organized and supervised by the *kiai's* wife and daughters who also administer treatment for the women patients.

Like most social and religious services which the religious functionaries offer to the general public, no fixed amount of fee is charged to the patient. They profess their service to be aimed at advancing Islam in society and serving both the community and God. Nonetheless, it is an established custom for the patient's family to reward the doctor with a sum of

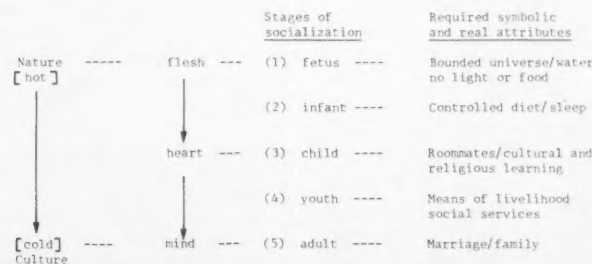


Fig. 5. Therapy as rebirth and socialization.



cash in addition to a periodic gift of material goods: a sackful of rice at harvest times, or such luxury food items as butter, cheese and refined sugar. Wealthy families may even donate a plot of farm land as *wakap*, untransferrable property meant to support the *ulama's* activities. All these cash and goods are accepted as donations rather than as a payment for their services.

Every patient treated at his *asrama* eventually recovers, the *kiai* claimed, but I found no way of proving his claim. What I noticed, however, is that a considerable number of the patients I talked to had been in *asrama* for the past 1 or 2 years. Some of them were described to me as being "cured" while others were "slow patients". The cured patients had evidently decided to enroll at the *kiai's pesantren* school as *santri* students to continue with their religious studies. Or, they found the therapeutic community most livable, at least for a while. As *santri* students, their way of life is mostly self-sufficient: they prepare their own meals, wash clothes, clean the rooms, while helping the *kiai* with farm work or the tasks related to the maintenance of *asrama*. For such services, they acquire rights to attend religious classes and a guaranteed minimum subsistence. Their families may continue to support them, for religious education is an act of devotion, meritorious to both the students and the families.

The terminal patients who have remained in *asrama*, on the other hand, have virtually become institutionalized. The majority of them come from the towns and cities where it would be difficult for the families to keep an eye on the safety of the patient. In some cases, the families can afford to continue to support the treatment. These patients live either at *asrama* or with local families to which the patients' families pay a regular amount of fees for room and board. They engage in minor tasks for the family, *asrama* and community, and have become assimilated to the local daily routines.

A failure of treatment is generally attributed to God's will, a predetermined fate nobody can alter or should blame. The belief in predetermination (*takdir*) thus precludes the *kiai* from being held responsible for unsuccessful consequences. But at the same time, the *kiai* is not free to judge the failure as an instance of impossible fate, give up hope, and send the patient home. To resign to the fact of immediate fate would be against the Islamic doctrine of self-determination (*ihitiar*) and would be interpreted as an act of lacking faith. Only the patient's family should make such decisions.

Most incurable patients eventually return home to live in the community like those mentally afflicted residents in my village, where they enjoy freedom from ostracism and social constraints. As long as their presence does not present an immediate threat to the community, even the community has no legitimate ground to expell the afflicted: it would be to defy God's will to do so. Rather than being seen as a threat to the existing norm of society, the patient's disorderly behavior is generally tolerated, and in some cases, a mad man's ritual status is even elevated to that of a Sufi saint: both are social deviants, but because of their selflessness, they are believed to possess extraordinary, if not useful, powers that might

affect the lives of the villagers. Their shared belief in the indeterminacy of fate and the ambiguity of perceived reality is reflected in the villagers' responses to the mentally afflicted residents.

# REFERENCES

1. The fieldwork on which this paper is based was sponsored in part by the Wenner-Gren Foundation for Anthropological Research and the National Science Foundation. I would also like to express my gratitude to Dr Charles Leslie, Dr Charles F. Keyes and Dr Arthur Kleinman for their useful comments on earlier drafts of this paper.
2. On the indigenous medical practices, see Jaspan M. A. *The Traditional Medical Theory in Southeast Asia*. Univ. Hull Publ. Hull, England, 1969 and his article, The social organization of indigenous-modern medical practices in southwest Sumatra. In *Asian Medical Systems* (Edited by Leslie C.), pp. 227-241. Univ. California Press) Berkeley 1976. Also Schmidt K. E. Folk psychiatry in Sarawak: a tentative system of psychiatry of the Iban. In *Magic, Faith, and Healing* (Edited by Kiev A.), pp. 139-155. The Free Press, New York, 1964. A brief discussion on the Burmese curing system is found in Nash M. *The Golden Road to Modernity*, pp. 192-201. Wiley, New York, 1965; Spiro M. E. *Burmese Supernaturalism*, pp. 144-203. Prentice-Hall, Englewood Cliffs, NJ, 1967. On the Thai healing ritual, refer to Tambiah S. J. *Buddhism and the Spirit Cult in North-east Thailand*, pp. 312-336. Cambridge Univ. Press, Cambridge, 1970. On the Malay psychiatry, brief discussions are found in Provencher R. Orality as a pattern of symbolism in Malay psychiatry. In *The Imagination of Reality* (Edited by Becker A. L. and Yengoyan), pp. 43-53. ABLEX Publishing, Norwood, 1979; Dean S. R. and Thong, D. Shamanism vs psychiatry in Bali, "Isle of the Gods": some modern implications. *Am. J. Psychiat.* **129**, 59, 1972.
3. The title of *kiai* usually distinguishes a man of high religious learning from ordinary religious functionary-teacher referred to as *ulama* on the basis of his charismatic influence in Islamic communities and his large number of followers beyond a parochial locality. For the sociopolitical role of the *kiai* in Java, refer to Geertz C. The Javanese Kijaji: the changing roles of a cultural broker. *Comp. Stud. Soc. Hist.* **2**, 228, 1960., or my Ph.D. dissertation, A traditional leader in a time of change: the kijaji and ulama in West Java. University Microfilms International, No. 76-24105.
4. For the ethnohistory of the era, refer to Horikoshi H. The Dar ul-Islam movement in West Java. *Indonesia* **20**, 59, 1975.
5. Nathan Kline reports in his article, Psychiatry in Indonesia (*Am. J. Psychiat.* **19**, 809, 1963) that in both Bogor and Grogol mental hospitals near Jakarta, the number of male patients exceeds that of female patients. The young assistants at *asrama* made a joking comment on the cause of male anxiety. It is called 3H referring to *halal*, *haram*, and *habek*: "It is difficult to make a living out of legitimate means (*halal*), but one is prohibited to engage in illegitimate activities (*haram*) either, so that the only means left is to gamble (*habek* = strike cards).
6. Kraepelin E. Vergleichende Psychiatrie. *Zentbl. Nervenhilf.* **15**, 433, 1904 (reviewed in "Kraepelin Bedeutung Fur Die Kultur-Psychiatrie" by Hans Lauter (transcript), Munich, 1964; Pfeiffer W. M. Psychiatric peculiarities in Indonesia (Psychiatrische Besonderheiten in Indonesia). Transcript, Erlangen, West Germany (reviewed in *Transcult. Psychiat. Res.* **111**, 116, 1966; Kline, *op. cit.*, p. 813.

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7. These categories do not exist as labels in the diagnostic system, but are recognized as being distinct nonetheless.
8. H. B. Murphy who studied the mental patients in Singapore (Culture and mental disorder in Singapore. In *Culture and Mental Health: Cross-Cultural Studies* (Edited by Opler M. K.), pp. 291-316. MacMillan, New York, 1959) suggests that a relatively high rate of admission among the Malay population between the ages of 15 and 24 may be attributed to the difficulty of transition from easy and protected childhood to seeking independence and entering complex interpersonal relations brought by marriage (p. 304). He also reports that the hospital admission rate of the Malay male population in the ages between 15 and 34 has been consistently high (ranging between 71% to 86%) since the earliest data was ever collected in 1917. Only 5-9% of the admitted Malay male were over the age of 45. Many observers have also reported that the renowned culture-bound mental illness called *amok* is peculiar to Malay males and occurs among the young adults.
9. Grogol hospital is located outside Jakarta. It has 400 beds with an admission rate of 100 year. It has only five general practitioners. In Bogor hospital, the capacity is 1200 with an annual 400 admission rate. The staff consists of 5 doctors of which 3 were psychiatrists. Kline, *op. cit.*, p. 810-811.
10. James T. Siegel provides an extensive analysis of the concept of *hawa nafs* as it is used among the Atjehnese of North Sumatra. Refer to his *The Rope of God*, pp. 98-133. Univ. California Press, Berkeley, 1969.
11. Levi-Strauss C. *Structural Anthropology*. Basic Books, New York, 1963.
12. Many cultures with Greek, Islamic and Ayurvedic medical traditions employ the humoral theory for explaining and treating illness. In the anthropological literature on folk medicine, hot-cold syndromes have been seen to have social and symbolic implications. Currier R. L. Hot-cold syndrome and symbolic balance in Mexican and Spanish American folk-medicine. *Ethnology* 5, 251, 1966; Madsen W. Hot and cold in the universe of San Francisco Tecospa, Valley of Mexico. *J. Am. Folklore* 68, 123, 1955; Foster G. M. Relationships between Spanish and Spanish American folkmedicine. *J. Am. Folklore* 66, 201, 1953; Foster G. M. Disease etiologies in non-Western medical system. *Am. Anthropol.* 78, 773, 1976; Ingham J. M. On Mexican folk medicine. *Am. Anthropol.* 72, 76, 1970.
13. A number of lesser supernaturals are recognized by the Sundanese. Among them are *jurig*, the most common native spirit, *hantu*, ghosts and the souls of the dead, and *jinn*, the Islamic spirits written about in the Koran. They are believed to dwell in messy dark areas such as swamps, graveyards, and garbage dumps, or in the bamboo forest. They could be either male or female and transform into human forms and animals. They may have families of their own, and must subsist just like humans.
14. Orhan M. OzTurk reports (in Folk treatment of mental illness in Turkey. In Kiev A., *op. cit.* [2]) that the Moslems in Turkey also associate mental illness with spirit possession (p. 351). All mental illnesses that are not organic or genetic in origin are believed to be related to spirit possession.
15. OzTurk in above article also reports that nondestructive mental patients are not necessarily considered insane, p. 349.
16. For a brief survey of Arabic medicine, refer to Brown E. G. *Arabic Medicine*. Cambridge Univ. Press, Cambridge, 1962; Bürgel C. J. Secular and religious features of medieval Arabic medicine. In Leslie C. *op. cit.*, [2] pp. 44-62.
17. This practice is commonly seen between the religious figure and his followers. It is practiced particularly when a person is about to undertake a new venture, take a trip, or when he is ill.
18. For the difference in the world-views and values between the two sexes, refer to my Islam and social change among the Moslem Sundanese in West Java. *Kabar Seberang* 4, 41, 1978.
19. For a discussion on the tolerance of social deviants among the Sundanese, refer to my Mental illness as a cultural phenomenon. *Indonesia* 28, 1979.

## APPENDIX

## TIMETABLE FOR ASRAMA FOR THE PATIENTS

	Hours	Scheduled Activities
Morning	4 -----	wake up for the day's first prayer
		bathing
	6 -----	a glass of water
		cleaning rooms
	9 -----	sunbathing
Noon		breakfast
		massage
		task assignments
	12 -----	Noon prayer
		afternoon nap (2½ hours)
		free time
	3 -----	afternoon prayer
	4 -----	supper
		massage
	6 -----	evening prayer
		religious studies
		bathing
	9 -----	the day's final prayer
		go to bed
	11 -----	rooms being locked

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## THE IMPACT OF INDIGENOUS HEALING ACTIVITY: AN EMPIRICAL STUDY OF TWO FUNDAMENTALIST CHURCHES

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**Abstract**—This paper describes the relationship between the form and frequency of religious activity within two fundamentalist churches and the emotional status of the participants. The data derive from a 13-month field study of all church activity within a Newfoundland coastal community where religiously-based healing rituals are a primary indigenous response to illness and general misfortune. Based on systematic observations of religious behaviors and responses to the *Cornell Medical Index* by all members of both churches, it was found in one church that the more frequently people engaged in religious activities of all types, the less likely they are to report symptoms of emotional distress. Significant variation was found between the churches and within the churches in terms of the psychological impact of types of religious activity. These variations are related to the sociocultural structure of healing efforts within the churches as well as to the patterned roles of male and female participants. The results are discussed in terms of current issues involving the cross-cultural evaluation of indigenous healing activity and future lines of research are outlined.

### INTRODUCTION

Since the latter half of this century, anthropological and psychiatric research has generated a considerable body of descriptive data on the emotional impact of participation in religious ritual. This research has pointed to the proposition that intense religious participation often has longlasting effects on emotional integration and adaptive behavior. Opler, for example, described the positive emotional impact of shamanistic ritual among the Apache [1], and Leighton and Leighton analyzed the function of the Navaho singer's (curer) activities in relieving anxiety accompanying sickness [2]. More recently, positive emotional effects of ritually-induced trance and possession states have been reported in Haiti, Alaska, Ethiopia and Sudan respectively [3-6]. Spiro's classic analysis of Burmese religion is subtitled "a study in the explanation and reduction of suffering" [7], and the Guardian Spirit Ceremonial among the Salish Indians of Western Canada has been described as a "psychohygienic ritual" that relieves a variety of symptoms expressive of "anomic depression" [8].

These reports clearly support Malinowski's earlier notion of a functional relationship between religious participation and psychological integration [9]. In addition, field observations of this type have inspired and supported a number of theoreticians who have elaborated the Malinowskian theme concerning the psychologically integrative function of religious belief and behavior [10-15]. Glick, in fact, has characterized this orientation as a *leitmotif* in the anthropological study of religious systems [16, 17].

Examining the nature of human rituals generally, Radcliffe-Brown offered an important modification to Malinowski's formulation: he stressed that ritual activities, rather than alleviating anxiety and insecurity, could generate these psychological states because rituals (1) socially define when individuals *should* feel distressed, and (2) may be perceived as inadequately

performed [20]. Neither these anxiety-generating aspects of ritual involvement, nor the broader issue of the dysphoric psychosocial impact of religiously-based healing activities generally, has received careful study.

A review of the literature indicates, however, that both positive and negative emotional experiences may result from participation in the *same* religious healing rituals. Opler, for example, described chronic nervous apprehension of an Apache couple who felt utterly dependent on the ritual activities of an Apache shaman for the maintenance of their health [1, p. 1386]. Within the context of ritually-induced spirit-possession, Mischel and Mischel described the anxious behavior of some individuals attending possession rituals in Trinidad who expressed fear of injury by supernatural powers if they became possessed [21].

More recent fieldwork reports also document the emotionally disorganizing effects of non-medical healing activities. Prince, for example, has noted that (Nigerian) Yoruba possession cults encourage dissociation and multiple personality formations [22]. Pattison's report on faith healing in American fundamentalist groups includes a description of nine individuals (about 20% of the sample) who had experienced faith healing but who also acknowledged a chronic inability to cope with stress [23]. Within the Puerto Rican healing tradition known as *Espiritismo*, Koos has described the negative psychosocial consequences experienced by some individuals who have undergone protracted training to develop their "faculties" for communication with the spirit world [24]. Among the Salish Indians of Canada, Jilek has described two participants in the Guardian Spirit Ceremonial who failed to show any improvement in their initial anomic depression; one of them experienced an exacerbation of his depressive condition [8]. Finally, Snow has noted how urban black folk healers may inspire fear within clients as well as whole communities [25].



The research cited above clearly indicates that, for some individuals, participation in non-medical healing activities may be emotionally and behaviorally disorganizing. However, previous discussions in this area of research have characteristically assumed or simply asserted the effectiveness of these activities, moving quickly to describe possible reasons for their apparent therapeutic effects [4, 26, 27].

Similar conclusions have been reached within the field of medical anthropology where the focus of theoretical interest has been on the alleged therapeutic impact of indigenous, non-medical healers practicing within religious contexts. In a major review of research in cultural psychiatry, for example, Kennedy found that "in no study reviewed is a large sample of patients systematically examined and diagnosed by a qualified observer, their native therapy chronicled, and follow-ups of their outcomes made" [29, p. 1172]. More recently, Kleinman has noted that "only a few ethnomedical studies have systematically examined the therapeutic outcome of patients treated by indigenous healing systems, analyzing both their efficacy and toxicity" [30, p. 82]. It appears therefore that careful empirical assessments of the impact of religious participation may contribute to an understanding of the functions of religious systems generally as well as to our understanding of how indigenous healing systems work.

#### THE RESEARCH PROJECT

The purpose of this paper is to report and discuss a field study which examines the relationship between religious participation and emotional status within two fundamentalist churches in a Newfoundland coastal community.

Most research on non-medical healing within fundamentalist groups focuses on the reportedly beneficial effects of such striking ritual practices as trance and possession or "laying on of hands". A review of the literature on the alleged therapeutic impact of dissociative states concludes, however, that research in this area is "largely anecdotal" and that "much more work is required to really evaluate the outcomes" [31, p. 124]. In addition, little attention has been directed toward the emotional impact of other forms of intense ritual religious activity, such as testimonials of faith or pretrance behavior. Nor has there been systematic study of differences in religious ritual participation—and its impact—according to the age and sex of adherents.

As other reviews have noted [29, 30], studies of non-medical healing activities generally have not employed a methodology which can in fact capture the full variation of psychological states that might appear within a group of participants. The exclusive use of key informants and selected case examples provides detailed qualitative data, but limits the range of information available to the researcher.

With these considerations in mind, a field study was conducted to assess the *range* of positive and negative effects on health status associated with religious participation. The study focused on members of two fundamentalist churches in a relatively isolated village of fishing and mining families on the northeast

coast of Newfoundland. The research involved three interrelated procedures:

- (1) identification and measurement of the type and extent of participation in religious activity by each church member over a one year period,
- (2) assessment of each church member's subjective sense of his/her physical and emotional health at the end of the year of observation, and
- (3) analysis of the relationships between members' physical and emotional health and their participation in religious activities, using data from health survey instruments and from personal interviews. These procedures were undertaken to assess the full range of relationships that might exist between different types of religious activity and the self-reported complaints of psychological and physical distress of each church member.

#### THE RESEARCH SETTING

Northeast Harbour (a pseudonym) has a population of 400. The first settlers arrived at the turn of the century and were descendants of emigrants from the West Country, England. Until the early 1960s the general ethnographic features of this community resembled those of other traditional Newfoundland fishing settlements [32, 33, 34]. In 1964 a road established closer ties between Northeast Harbour and other communities and provided access to a copper mine which offered new employment alternatives to the traditional activities of fishing and "woods-work". In addition, the road greatly increased contact with the goods, services, and information available throughout the province. Thus, by 1973 when fieldwork began, the community had experienced considerable "modernization" [35, 36].

A Pentecostal church, which we will call *Church A*, served as one focal group for this study. It was established in 1954 by a small group of families who became disaffected with the only other church in their community. By the time fieldwork began (1973), about half the families in Northeast Harbour had become members. This church was selected for study because four characteristics of this religious community closely resemble those generic aspects of all non-medical healing efforts [37]. First, the members of the church share an "assumptive system" or "world view" about the causes and proper treatment of illness. Second, the Pentecostal "preacher" lives in the community and maintains a close personal relationship with church members, a relationship enhanced by a charisma derived from his personality and status within the church as a "healer". Third, members of the church *expect* to receive "a blessing", to be healed or to receive special insight about their personal problems through participation in church activities. Finally, there are special techniques or ritual activities, practiced within the church, involving anointing with oil, "laying on of hands", and glossolalia, which are believed to enhance healing and relieve suffering [38].

Based on the theoretical importance ascribed to these four aspects of effective healing contexts, it was predicted that these church members would report

low levels of emotional disturbance. On the other hand, initial fieldwork indicated that there was considerable intra-group variation in the extent to which church members involved themselves in the church's ritual activities. Thus, a second prediction was that the more active the individual's involvement in Pentecostal ritual activity, the less likely such people would be to report complaints of emotional distress.

The other church in Northeast Harbour was affiliated with a mainline Protestant group in Canada. This church, which we shall call *Church B*, was established by settlers at the turn of the century, and served as the only religious institution in the community until the early 1950's when a few families, already marginal members in a social and economic sense, left to establish the Pentecostal sect. Prior to fieldwork in 1973, the membership in Church B had declined from over 100 people to 54 members.

Church B is important within the framework of this study because, as an institution, it was increasingly unable to provide psychological support for its members. Although its members shared many fundamentalist tenets in common with members of the Pentecostal Church, there was a qualitative difference between the two churches in the form and intensity of religious participation. Members of Church B, for example, spent about 6 hr a week in their church, while members of Church A spend at least 13 hr a week in their church.

There are four factors which contribute to this important difference between the two churches. First, the regional minister serving Church B was unable to maintain a strong charismatic leadership because he lived in another community and conducted only one service each month in Northeast Harbour. Second, neither the minister nor any lay person had a reputation as a "healer" in Church B.

A third important factor, closely related to the absence of a healer role in Church B, was the lack of a shared belief system about the efficacy of Diving healing. Church B members clearly did not stress the possibility of instantaneous and unconditional healing from God in the enthusiastic manner embraced by the Pentecostals (Church A). Comments from several key members of Church B serve to illustrate their orientation: One fisherman, discussing faith healing, confided: "I don't believe it myself. You take Mary C., she's been crippled up with arthritis for years and they've [the Pentecostal Church] prayed over her more'n once, I'll tell you. And she's a believer too!" Another member of Church B agreed and pointed to a similar case: "Look at ol' Uncle Max there. He can hardly walk. I remember when he lived out on the island. Preacher came in here, said they prayed and could hear his sinews squeak when they moved his leg. Said he'd walk soon. But my son, he's never walked right!"

As a reflection of this critical orientation, requests for healing were infrequent in Church B and always prefaced by the phrase: "If it be Your will — — —," while healing in the Pentecostal Church was essentially demanded, viz. "Heal me now, oh Lord!" Such requests triggered emotional support and group activity ("laying on of hands") in Church A, but little or no group support in Church B. In fact, during 12 months of observation of virtually every service in

Church B, no formal healing rituals were performed. The only healing request eliciting concerted group activity occurred on an Easter Sunday evening at the request of an elderly man facing an impending operation for cancer. This action was essentially an *innovation* within a church which provided no healing ritual that could be customarily performed for members attempting to cope with illness problems [35, pp. 120-124].

Overall then, the quality of religious participation in the two churches in Northeast Harbour was strikingly different. Based on the apparent ineffectiveness of activities in Church B to respond to members' psychological needs, I anticipated that there would be no relationship, and possibly even a negative relationship between participation in Church B and reported emotional health. For reasons I have examined above, I expected positive relationships between religious participation and emotional health in Church A.

#### THE MEASUREMENT OF HEALTH DISTURBANCES AND RELIGIOUS BEHAVIOR WITHIN NORTHEAST HARBOUR

The Cornell Medical Index (CMI) was selected to record the number and types of illness complaints identified by church members because the CMI is one of the few health survey instruments that permits the informant to express complaints related to physical as well as psychological functioning [39]. In addition, the CMI was a time-efficient way of obtaining standardized, quantifiable data from two relatively large samples of respondents. The CMI was administered to all church members 13 months after observation on religious behavior was initiated, and two global complaint scales were obtained: (1) a physical complaints score (based on responses to 144 CMI questions), and (2) a psychological complaints score (50 items). These perceived concerns represent what have been aptly described as "the language of distress" within a community [40]. As such, they focus attention on the range and number of symptoms present during the development of physical and emotional distress syndromes. Fieldtesting and the cultural appropriateness of the CMI have been discussed elsewhere [35].

Observation of religious behavior began during the first month of fieldwork and continued uninterrupted for 12 months. This involved attendance at all church activities in order to record the details of individuals' participation in ritual and other activities of the church. The focus of observation was the distinctive set of religious behaviors encouraged by each church: glossolalia, testimonials, seeking possession by the Holy Spirit, requesting ritual healing, helping at the altar and consistent attendance within Church A; testimonials and consistent attendance within Church B. The frequency distributions of these forms of religious participation demonstrate considerable differences *within* and *between* the two churches, serving to document my thesis that there was a distinct difference in the quality and psychological significance of participation within each church.

## FINDINGS

*The nature of religious behavior in Church A*

Glossolalia, or what Pentecostal church members call "speaking in tongues", is viewed as evidence that the individual is literally possessed by the Holy Spirit; the utterances are thought to be the voice of God speaking through the individual. All "saved" individuals are expected to experience this divine "Gift of the Holy Spirit". As the frequency distribution in Table 1 below indicates, glossolalia was found to be primarily a male activity.

In seeking the "gift of tongues" individuals engage in what we will classify as a second form of religious participation called *possession* behavior. This behavior, called "dancing in the Spirit", involves gyrating movements around the church or rolling on the floor. After several minutes the person's frenetic movement subsides, and other "saints" rush to the individual's side, bending close to hear the Spirit's message. More men than women engage in possession behavior (see Table 1), but they do not always speak in tongues subsequently. In comparison, those few women—all elderly widows—who do engage in possession behavior do ultimately speak in tongues. Their "messages" are characteristically softly spoken and of short duration in contrast to the boisterous and protracted glossolalia of men.

A third form of religious behavior in Church A is the testimonial. All Pentecostal services designate time for congregants to "stand as the Spirit moves 'em" to declare their faith and tell how God has influenced their lives. The main themes of these testimonials are: gratitude for being saved; gratitude for being healed of illness; requests for help with some personal problem, usually illness and/or a disruption in family relationships; and appeals that sinners in the congregation may be saved. The following testimony given by a middle-aged woman serves as an example of recurrent themes:

Precious Jesus, precious Jesus. I'm glad to stand tonight and say I'm under the blood! Praise God for savin' my soul

six years ago. I was enjoyin' the world, livin' in sin and God lifted me up, praise Jesus. I remember bein' sick the last year, praise God, I asked for healin' and I felt the heat from his hand, my friends. I stand here whole, praise the Lord. Oh Jesus, precious Jesus I pray you'll move in this meetin' tonight, that your spirit will fill this place and save these sinners before it's too late! You're comin' soon oh Lord and we wants to be ready. Bless my boy oh Lord and bring 'im into the fold. He's goin' on in sin Lord, so much, he won't listen to me. Goin' to the club with a hard crowd and drinkin'. Oh God I pray you'll move on him before it's too late, oh God! Precious Jesus, precious Jesus, precious Jesus.

The emotional fervor, intensity, and sincerity of testimonials cannot be underestimated. Some individuals giving testimony displayed almost uncontrollable crying and anguished pleading. The preacher and congregation were especially effective in their encouragement of individuals testifying. Frequent cries of Praise God!, Precious Jesus! and Amen!, Halleluiah! serve to inspire and reward lengthy, emotional testimonies.

On the other hand, not all members of the Pentecostal congregation will stand during a service to testify. Many younger "saints" find it intimidating to testify in front of the congregation. One miner described his feelings this way:

When the preacher calls for us to testify my heart is jumpin'. I got to think it all over, what I'm gonna say. Sometimes it's like my heart's comin' clean outa my chest. But when you're done that's some feelin'! It's a real blessing. I feel some bad if I don't stand.

An older Pentecostal fisherman who had not testified for several weeks stood slowly one Sunday to confess:

I feel so ashamed. Oh God you knows I try but I finds it so hard to stand. Praise God I got the strength now. Oh Lord I wants to praise your name.

These quotations serve to illustrate that men especially view the testimonial as a social obligation, and in fact men do testify more frequently than women, as shown in Table 1. However, the testimonies by women are longer and more emotionally

Table 1. Frequency distributions of religious behaviors for Pentecostal members, by sex

	Males	Females		Males	Females
Glossolalia			Requesting		
Never	19	26	Ritual Healing		
Twice a month	4	2	Never	13	23
or more	23	28	1 or 2 requests	6	5
			3 or more requests	4	0
				23	28
Testimonials			Helping at Altar		
Never	4	17	Never	16	26
Twice a month	10	7	1 or more times	7	2
Every meeting	9	4		23	28
	23	28			
Seeking Possession			Attendance		
of Holy Spirit					
Never	19	26	Not at all	2	6
Twice a month	2	2	Sundays only	5	6
Once a week	2	0	Every meeting	16	16
	23	28		23	28

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charged than testimonies by men. It would appear that men favor glossolalia for affective expression while women tend to express their feelings mainly through testimonies.

Three additional forms of religious behavior were also observed: (1) ritual healing, (2) helping at the altar, and (3) consistent attendance. Ritual healing is an important Pentecostal activity, involving the "laying on of hands" by elders and the preacher within the context of intense group support involving stirring music, singing, "dancing with the Spirit", and glossolalia. Part of every Sunday evening service is set aside for this specific healing ritual. When someone requests this ritual, the activities usually involve the whole congregation, as many as 50 adults, and may continue for an hour or more.

The other religious activities include helping at the altar, which refers to leading songs, reading the Bible or giving a short sermon. Pentecosts do not volunteer for these activities; rather, the preacher invites someone's participation at the altar for a particular Sunday. In most cases, the person asked is a male. Occasionally, a woman is asked to lead the singing. Finally, consistent attendance at all services is expected, an obligation that involves as many as thirteen hours a week in church activity. Only people who are considered too old or too sick (i.e. bedridden) are exempt from this expectation.

#### *The nature of religious behavior in Church B*

Recurrent forms of religious participation in Church B are minimal compared to the variety of activity in Church A. As Table 2 below indicates, only two forms of behavior were consistently observed in Church B, compared to the six different forms of religious behavior in Church A described above.

The period of time in Church B devoted to testimonials is highly structured. While there is a clear expectation that everyone will testify, the "elders" of the church (both men and women) invariably testify first. Consequently, I have had to code this activity somewhat differently from the way testimonial behavior was coded in Church A. Rather than indicating frequency of testimonials, the figures in Table 2 document the order in which church members customarily gave their testimonials.

Table 2. Frequency distribution of religious behaviors for Church B members, by sex

	Males	Females
Testimonials		
Never testifies or always within last half of congregants to testify	11	17
Usually within first half of congregants to testify	12	12
Attendance	23	29
Never	1	5
Holidays or once a month	9	9
Every service	14	16
	24	30

Testimonial behavior in Church B was observed to be much less emotional and spontaneous than testimonial behavior in Church A. In addition, testimonial behavior was not utilized more expressively by women in Church B (as it was in Church A); both sexes appeared to testify with equal frequency and intensity.

Having described and documented the differential quality of religious participation at each church, I turn now to consider whether these differences are related systematically to the emotional impact of religious activity within each church. We will examine the relevant data from Church A first, then turn to Church B.

#### *Physical and psychological complaint scores and religious ritual participation in Church A*

By observing and recording the frequency and intensity of religious behaviors, and obtaining physical and psychological complaint scores derived from the CMI, it is possible to examine the relationship between the extent of religious participation (i.e. healing, glossolalia, testimonials) and the frequency of reported symptoms of physical and emotional distress.

The Physical Complaints Score of the CMI data was found to be highly correlated with the Psychological Complaints Score for both men and women congregants in both churches. Recognizing the possibility that people reporting many physical complaints may also report many symptoms of psychological distress that are, in fact, precipitated by physical illness, the effect of physical complaints was removed statistically when the relationships between psychological disturbance and religious behaviors were examined. That is, first-order partial correlations were computed between psychological complaints and religious behaviors, controlling for the effect of physical complaints, thereby enabling a clearer assessment of the relationship between participation in religious activities and emotional distress scores.

The data in Table 3 indicate that, among Pentecostal men, as ritual participation increases the reporting of psychological complaints decreases. That is, the most important pattern in Table 3 is the number of statistically significant *negative* correlations between psychological complaints in general, specific types of psychological complaints, and religious ritual participation. An alternative interpretation of these correlations might be that Pentecostal men whose psychological distress level is low more readily take part in religious activities. Our findings are, however, consistent with the theoretical perspective which suggests that religious participation may have beneficial effects on emotional integration.

Observational data spanning 13 months indicate that many of the people delivering testimonials and/or seeking ritual healing are emotionally distressed individuals. They express their distress—and seek relief—through participation in religious ritual. And as the correlations in Table 3 show, Pentecostal men do appear to experience relief of psychological distress symptoms. More specifically, Table 3 shows that, for Pentecostal men, frequency of possession behavior is *negatively* correlated with feelings of depression, sensitivity, and anger. That is, the more fre-



Table 3. Zero order correlations between total physical complaints and Pentecostal religious behaviors and first order partial correlations between types of psychological complaints and Pentecostal religious behaviors, by sex\*

Male CMI Scores	Religious Behaviors					
	Glossolalia	Testimonials	Possession Behavior	Ritual Healing	Helping at Altar	Attendance
Total physical complaint†	0.17	0.08	0.15	0.08	-0.09	0.11
Total psychological complaints‡	-0.22	-0.14	-0.31	-0.14	-0.23	-0.09
Inadequacy	-0.22	-0.07	-0.28	-0.07	-0.38**	0.06
Depression	-0.32	-0.18	-0.35**	-0.18	-0.22	-0.22
Anxiety	-0.28	0.00	-0.29	-0.21	-0.29	-0.05
Sensitivity	-0.32	-0.01	-0.36**	-0.03	0.09	0.10
Anger	-0.35**	-0.54**	-0.38**	-0.26	-0.10	-0.44**
Tension	0.22	0.21	0.10	-0.00	-0.04	0.38**
Female CMI Scores						
Total physical complaint†	0.25**	0.06	0.25**	0.11	-0.17	0.02
Total psychological complaints‡	0.09	-0.44**	0.09	-0.31	-0.13	0.06
Inadequacy	0.10	-0.29	0.10	-0.25	-0.13	0.12
Depression	0.17	-0.39**	0.17	-0.16	-0.19	-0.06
Anxiety	-0.01	0.09	-0.01	0.09	0.10	-0.09
Sensitivity	0.10	-0.41**	0.09	-0.26	-0.12	0.05
Anger	0.04	-0.23	0.04	-0.04	-0.03	0.07
Tension	0.03	-0.40**	0.03	-0.39**	-0.28	0.01

\* All correlations are Kendall's nonparametric Tau; one-tailed tests of significance are reported because the direction of the relationships are predicted. Levels of significance  $\leq 0.05$  are marked with a double asterisk.

† Correlations for males based on an  $n$  of 23; for females an  $n$  of 28.

‡ Correlations between total psychological complaints and religious behaviors as well as the correlations between the types of psychological complaints and religious behaviors are controlled for the effect of total physical complaints. All of these correlations are based on an  $n$  of 20 males and 25 females. This table is reprinted with permission from the *American Journal of Orthopsychiatry*; copyright 1980, American Orthopsychiatric Association, Inc.

quently men engage in possession behavior, the less likely they are to report complaints of depression, sensitivity, and anger. Furthermore, the frequency of glossolalia is negatively correlated with feelings of anger, which suggests that as the practice of glossolalia increases, feelings of anger decrease.

Additional data in Table 3 indicate that among Pentecostal men testimonial activity decreases feelings of anger; helping at the altar decreases feelings of inadequacy; and frequent attendance at church decreases feelings of anger, but increases feelings of tension. Our impression is that this latter finding applies particularly to the younger "saints" who feel they are inadequate to the task of giving an impressive testimonial before a congregation of elders and peers.

Among Pentecostal women, the positive correlations between glossolalia, possession behavior and physical complaints suggest that as physical complaints increase, the likelihood of possession behaviors and glossolalia increases. However, in contrast to men, Pentecostal women who experience glossolalia do not appear to derive relief, measured in terms of reduced reporting of symptoms of emotional distress. That is, no statistically significant correlations between glossolalia and total psychological complaints or types of psychological complaints for women were found (Table 3). This finding is congruent with observational data on the social context of religious behavior indicating that: (1) few Pentecostal women consistently engage in glossolalia; and (2) those women who do engage in glossolalia do so with much less fervor and for a substantially shorter period of time than men.

Testimonial behavior among Pentecostal women correlates most significantly with CMI scores measuring psychological complaints. Specifically, frequency of testimonial behavior is *negatively* correlated with: (1) inadequacy, (2) total psychological complaints, as well as feelings of depression, (3) sensitivity, (4) anger and (5) tension. This pattern of negative correlations suggests that active involvement in testimonial behavior may serve to reduce the amount of psychological distress experienced by women. In this case testimonials may constitute a means of emotional catharsis for women, a benefit not experienced by men who engage in testimonials (see Table 3). This difference reflects the fact that women's testimonial behavior within the Pentecostal Church tends to be considerably more protracted and emotional than the testimonial behavior of men.

Additional data in Table 3 indicate that among Pentecostal women consistent attendance at church is not correlated with frequency of reported physical or psychological complaints, that helping at the altar is not correlated with frequency of physical or psychological complaints, and that involvement in ritual healing is negatively correlated with feelings of tension, inadequacy, and sensitivity.

Thus, participation in ritual healing appears to provide only modest relief of psychological complaints for Pentecostal women. The pattern of statistically significant correlations reported in Table 3 indicates that religious behaviors other than ritual healing have a greater impact on the number of reported psychological complaints for women as well as men. That is, those religious behaviors which are engaged in more

consistently—such as testimonials among women and glossolalia or possession behavior among men, rather than the relatively infrequent healing ritual—have a broader impact on the participants' overall sense of emotional well-being.

In summary, the pattern of correlations presented in Table 3 suggests that the more frequently people engage in religious ritual activities, the less likely they are to report symptoms of emotional distress. The pattern of correlations presented in Table 3 underscores the differences in religious ritual participation among Pentecostal men and women in Northeast Harbour, in that men derive greater emotional relief through possession behavior and glossolalia, while women experience relief through testimonial activity. Finally, both men and women appear to derive greater relief of emotional distress through possession, glossolalia and testimonial activity than they do through ritual healing.

#### *Physical and psychological complaint scores and religious participation in Church B*

The relationships between physical and psychological complaint scores and religious participation in Church B are shown in Table 4. Focusing first on the women, the basic finding is that there are virtually no significant relationships between religious participation and either physical or psychological symptom complaints. We must conclude therefore that women in Church B do not, as a group, experience psychological relief through either frequent church attendance or testimonial activity. This situation in Church B is strikingly different from Church A where Pentecostal women appear to derive considerable psychological benefits from frequent testimonial activity (see Table 3). This comparison reflects, I believe, the substantial differences in the form and intensity of testimonial activity in the two churches: Pentecostal testimonials are, for women, the primary mode of expression, allowing for protracted release of both positive and negative affects which are supported and encouraged by fellow congregants. Within Church B, testimonials (delivered by either sex) customarily are short, are not associated with intense emotionality, and elicit little sustained social support or encouragement from the congregants.

Turning to the male members of Church B, the figures in Table 4 demonstrate a significant positive correlation between physical complaints as measured by the CMI and the *order* of the male's appearance during the period of worship designated for testimonials: i.e. men reporting many physical complaints are the men who testify first during the service. This correlation reflects the cultural fact described earlier that elderly males, who have the most physical complaints, customarily give their testimonies first during the services in Church B. These older men also attend church services more frequently, thus accounting for the significant positive correlation between frequency of attendance and number of physical complaints for men shown in Table 4.

The series of correlations between total psychological complaints, the six subscales of psychological complaints, and religious participation for males shown in Table 4 indicates that males in Church B do not as a group experience psychological relief from

Table 4. Zero order correlations between total physical complaints and religious behaviors in Church B and first order correlations between types of psychological complaints and religious behaviors in Church B, by sex\*

Male CMI Scores	Religious behaviors	
	Testimonials	Attendance
Total physical complaints†	0.42**	0.43**
Total psychological complaints‡	-0.16	0.01
Inadequacy	-0.16	-0.18
Depression	0.07	-0.18
Anxiety	0.20	0.15
Sensitivity	0.33	0.09
Anger	0.30	0.25
Tension	0.12	-0.01

Female CMI Scores	Religious behaviors	
	Testimonials	Attendance
Total physical complaints†	0.09	0.04
Total psychological complaints‡	-0.02	0.02
Inadequacy	0.00	0.04
Depression	0.11	0.12
Anxiety	-0.22	-0.13
Sensitivity	0.12	0.12
Anger	0.03	0.08
Tension	0.03	-0.01

\* All correlations are Kendall's nonparametric Tau: one-tailed tests of significance are reported because the direction of the relationships are predicted. Levels of significance  $\leq 0.05$  are marked with a double asterisk.

† Correlations for males are based on the following sample sizes: with testimonials  $n = 23$ ; with attendance  $n = 24$ . Correlations for females are based on the following sample sizes: with testimonials  $n = 29$ ; with attendance  $n = 30$ .

‡ Correlations between total psychological complaints, types of psychological complaints and religious behaviors for males are based on the following sample sizes: with testimonials  $n = 20$ ; with attendance  $n = 21$ . Correlations between total psychological complaints, types of psychological complaints and religious behaviors for females are based on the following sample sizes: with testimonials  $n = 26$ ; with attendance  $n = 27$ .

either testimonial activity or frequent church attendance. In fact, the strength and direction of the correlations for males in Table 4 indicates that those men who testify first, and attend frequently, tend to report symptoms of anxiety, sensitivity and anger. These symptoms cannot be interpreted as secondary to extensive physical complaints because we have removed statistically the possible effect of the informants' perceived physical condition. Therefore, I view this pattern of correlations as evidence that men in Church B do not derive significant relief from psychological distress symptoms through their participation in religious activities. They perceive themselves to be in poor physical health, but activities within their church fail to respond to their health-related concerns. This line of explanation is consistent with our finding that during a year of continual observation there was virtually no sanctioned healing ritual. In addition, news of the the "wonderful" healing activity

occurring in the Pentecostal Church during the year served to accentuate the unfulfilling quality of the ritual activity in Church B. These factors work together to generate—or at least not relieve—dysphoric affects among the men in Church B, a situation clearly different from the positive impact of religious participation for men in Church A.

#### DISCUSSION OF FINDINGS

The pattern of correlations presented in Table 3 strongly supports the theoretical perspective that people who actively participate in religious ritual activities are likely to report fewer symptoms of psychological distress than individuals who participate less actively. Fifteen of the specific relationships reported in Table 3 reached statistical significance—a number far greater than predicted by chance alone. I have focused discussion on only those correlations that are statistically significant at the 0.05 level or less. It should be recalled, however, that the total universe of church members in the community was studied. It can be argued therefore that significance tests are irrelevant and that the sign and magnitude of correlations are the crucial features to evaluate. With this perspective in mind, the data in Tables 3 and 4 are compelling.

The strengths of the correlations are relatively large considering the fact that only one variable, involvement in ritual activities, was empirically evaluated. If measurements of congregants' commitment to the world view (belief system), relationships with the healer (the preacher), and "expectant faith" in healing had been included, the relationships between respondents' reported sense of emotional well-being and their religious participation could be expected to be even stronger. Inclusion of these variables in future research will provide a broader assessment of this model of healing.

The data derived from this study indicate that participation in specific religious ritual activities in Northeast Harbour is largely structured in terms of sex roles. The dissociative states involving glossolalia and possession behavior appear to reduce symptoms of emotional distress among men, but not women, because women infrequently engage in these forms of behavior in this religious setting. However, the current impression reported by most cross-cultural observers is that women engage in possession-trance or glossolalia more frequently than men [41, 42], and Bourguignon [43, p. 187] has raised this impression to a cross-cultural generalization. Based on my observations, it appears that the display of dissociate states may be functionally related to sex roles within a community. Glossolalia in Northeast Harbour, for example, is similar to the role men assume as spokesmen in other community contexts such as representing the household and serving on town committees. Further research on the impact of non-medical healing activities should therefore examine carefully the impact of sex roles in the organizational structure of healing activities. Moreover, except for one study [44], no research has examined how such activities may differentially affect various age groups.

The finding that the frequency of religious ritual behaviors is correlated with participants' scores of

emotional well-being suggests that it is the consistency of participation in religious activity, rather than only the content of the involvement, which is predictive of symptom reduction. A similar perspective was reported recently by Galanter and Buckley [45] whose observations of an American evangelical sect led to the conclusion that the *amount of time* spent in various modes of meditation was a significant predictor of decline in psychiatric symptoms and illicit drug use. In a clinical case analysis, Kleinman [46] has similarly emphasized the therapeutic importance of the long duration of indigenous treatments of psychiatric symptoms in Taiwan.

The significance of the frequency of ritual participation also bears on our finding that ritual healing activity was not as clearly related to reduced emotional distress in either men or women as were other forms of religious behavior. Ritual healing, involving "laying on of hands" and intense group support, has been described as *the* central healing activity within fundamentalist churches, but our findings show that ritual healing does not occur as frequently as other activities such as glossolalia or testimonials. This differential pattern of activities explains, I believe, the relatively modest relationship I found between ritual healing and psychological status.

Concerning glossolalia and possession behavior, the pattern of *inverse* relationships found between these dissociative states and emotional distress among Pentecostal men appears to be due to the therapeutic effect of three interacting factors: (1) the attainment of social status and enhancement of self-esteem within the church community as "God's spokesman" or someone "touched by God," (2) the acting out of aggressive behavior which is negatively sanctioned outside the church, and (3) the relief of emotional tension through verbal expressions that do not reveal the personal source or nature of those emotions to others in the congregation.

This latter point is also relevant to our understanding of the therapeutic value of testimonials among women in the Pentecostal church, where there is some risk that the personal source of one's troubles could be revealed. The risk is minimized, however, by using a highly formalized form of testimonial which effectively releases emotions in a manner similar to the performance of glossolalia.

If it has been established that ritual participation can be both emotionally gratifying and contribute to reduction of symptoms of emotional distress for some Pentecostal adherents, we must also consider whether participation in non-ritual church activities might be equally beneficial. This issue can be addressed by considering the data from the CMI scale labeled Inadequacy which measures a respondent's sense of social inadequacy. The best predictor of a low score on this scale among Pentecostal men is providing assistance frequently at the altar. The finding suggests that participation in non-ritual activities within a religious community may indeed have beneficial psychological effects. Findings from studies of other fundamentalist sects such as the Unification Church [47] and the Divine Light Mission [45] also indicate that variables unrelated to ritual activity, such as "work satisfaction" and "interpersonal cohesiveness," are important predictors of reduced psychological distress symp-

toms among the members. In field studies generally, however, these less dramatic forms of involvement in religious communities are not carefully assessed. Consequently, researchers are led to conclude that it is the dramatic forms of religious expression which have the most pervasive impact on participants' sense of emotional well-being. Further research will need to carefully measure the full range of activities inherent in religious "involvement" before firmer conclusions can be articulated about the relationships between religious ritual participation, non-ritual activity, and emotional status.

Some of the data reported in this paper also supports Radcliffe-Brown's [20] assertion that a perceived obligation to perform specific rituals may *generate* emotional distress. Feelings of tension are particularly strong among those Pentecostal men who attend church frequently. I believe this finding reflects the social expectations reported by the younger "aspiring saints" who feel obligated to express their faith in a behavioral form, but are very sensitive that their performance will be judged inadequate by elders and peers alike.

Although I found no notable deleterious effects related to religious participation in Northeast Harbour, the data in Table 4 are consistent with the interpretation that both men and women in Church B fail to derive significant emotional benefits from their participation in church activity. Moreover, the men in Church B tend to have heightened feelings of anger, anxiety, and sensitivity. These findings are in marked contrast to the data from the Pentecostal members, and reflect the fact that specific sociocultural healing mechanisms are absent or in decline within Church B, particularly: (a) a unified belief system about the efficacy of Divine healing shared by the congregants; (2) formal ritual procedures that respond to members' illness-related problems, and (3) an indigenous preacher/healer who is a charismatic leader. Unless these conditions change, it is likely that participation, and perhaps membership, in Church B will continue to decline with a subsequent attraction to the Pentecostal Church.

In discussing the CMI scores measuring complaints of emotional distress, it must be emphasized that I am not implying any direct relationships between CMI scores and psychiatric disease categories. Indeed, no church member, male or female, manifested symptoms diagnostic of major psychiatric illness, nor were any individuals disabled by their reported symptoms. The group of CMI scales used in this study do, however, closely approximate what Frank has described as a state of "demoralization", an emotional condition involving psychophysiological symptoms, feelings of low self-esteem, hopelessness, dread, anxiety, depression and confused thinking. In Frank's formulation "...a person becomes demoralized when he finds that he cannot meet the demands placed on him by the environment, and cannot extricate himself from his predicament" [37, p. 316]. This complex of symptoms closely approximates the types of complaints that are combined in what we have reported as the total Psychological Complaints Score of the CMI. Thus, our findings suggest that participation in fundamentalist religious ritual activities may have a strikingly beneficial impact on demoralized individuals. In



fact, the state of demoralization may be the general emotional condition most susceptible to positive change through non-medical healing activities [48]. This conclusion may apply most specifically to religious groups (such as the group reported here) which are well-integrated and accepted within the broader community. In contrast, religious groups perceived as radical minority sects may attract some individuals whose fragile level of emotional integration is disrupted, rather than strengthened, through religious participation.

The comparative data from these two fundamentalist churches demonstrates, however, that fundamentalist religious activities *per se*, without a supportive sociocultural context, have no positive effects and may generate quite dysphoric experiences for participants. Further research in this area represents, in my opinion, a field of considerable promise for medical anthropologists and cultural psychiatrists.

#### EPILOGUE

This paper offers a contribution toward understanding how, and under what conditions, indigenous healing practices benefit people. The discussion has focused on a set of religiously-based practices which do not include the use of medically-active herbs or drugs. Ethnographic research has documented, of course, many other kinds of healing practices and techniques involving a wide variety of relationships among patients, healers, patients' families, and the wider community [49-51]. These practices are attracting research attention, not only for what they may reveal about the dynamics of healing in cross-cultural perspective [52], but also for information

that may improve the delivery of health and mental health services in both industrialized and developing countries [53-55].

While there has been discussion of the methodological difficulties in assessing the impact of healing practices both within specific cultural settings [52] and between different cultural settings [56, pp. 151-156], a logically prior question requires further attention: namely, what kinds of information are necessary in order to fully assess the efficacy of indigenous healing practices? This final section discusses several answers to this question in order to outline some future research directions.

Examining my research in retrospect, as well as other published reports, there appear to be three "domains of information" that require attention in future outcome studies of indigenous healing practices: (1) the patients' pretreatment conditions; (2) the formal treatment process; and (3) the post-treatment condition of patients. Cutting across these three domains, the participants' (emic) views and the observer's (etic) assessment provide two potentially different sources of information. Figure 1 outlines the research foci that may be generated by this multilevel perspective.

The emic level of analysis proceeds from the premise that illness experiences are sociocultural constructions developed by the patient and his/her social network within a specific cultural context [53, 57]. Treatment effectiveness at this level is presumed to involve the alteration or reconstruction of the meaning of the patient's problem. It is expected that patients will define themselves as healed insofar as the healer's diagnosis and treatment are congruent with their own perceptions of the problem and treatment

Domains of information			
	Pretreatment conditions	The formal treatment process	Post-treatment conditions
Client's view	The definition/duration of the problem and the explanatory model employed by client and family, as well as their respective expectations of the treatment	The effective (personal) meaning of the treatment ritual	Sense of well-being and functioning in terms of the original definition of the problem, from point of view of client and family
Investigator's view	Health/mental health status  Level of daily functioning  Type/extent of social support  Type/extent of family based care and other healing strategies (including use of Western drugs and over-the-counter preparations)	Type and duration of treatment actions, including alteration of social relations, substance use, status of dissociation and physical interventions  Type and extent of social support from treatment personnel and family	Health/mental health status  Level of daily functioning  Type and extent of social support from family and/or new alliances with treatment-related personnel

Fig. 1. Domains of information relevant to an assessment of indigenous healing practice.

expectations. Thus it is possible that, among those claimed to be healed, there will be different criteria used for making that claim. Patient satisfaction, for example, may be based on the reduction of emotional or physical distress and/or the improvement of human and spiritual relationships. These varied sources of satisfaction have been documented empirically in a number of different treatment settings [23, 52, 58, 59].

These studies have, however, been based on *retrospective* reports provided by patients who completed treatment at *varying* lengths of time previous to the research interview. Two different conclusions that have been drawn about the efficacy of indigenous healing may be in part related to this research design. For example, in a study of indigenous treatment in Taiwan, Kleinman and Sung [52] interviewed 12 patients two months after their initial visit to a specific healing shrine. Based on an indepth assessment of this sample, as well as a survey of an additional 100 cases being treated by various indigenous healers, they concluded that those patients of indigenous healers in Taiwan at greatest risk for being dissatisfied with treatment were those suffering severe acute disease (defined from a biomedical perspective). Such conditions presumably generate debilitating symptoms which are not alleviated by indigenous practitioners, and may even be exacerbated by these healers [52, pp. 13, 16, 24].

In contrast, Pattison's team in Seattle conducted a detailed study of 43 individuals who claimed successful faith healing. The interval between the alleged healing event and the interview ranged from two weeks to 51 years with a mean interval of 15 years [23]. Although 70% were assessed as having had either a "life-threatening" medical condition or "moderate disability" prior to faith healing, the whole sample claimed to have been fully healed by religiously-mediated treatment. That is, those at greatest risk for treatment dissatisfaction from Kleinman's perspective still reported treatment success. Pattison's report concluded that the subjects' perception of healing was not related to a change in physical symptomatology because "from the subjects' points of view, relief of symptoms is really a tangential issue. For them, faith healing reaffirms their belief system and their style of life" [23, p. 403].

While there may be different cultural perspectives between these two study samples concerning the relevance of symptom remission as a criterion for healing, it is noteworthy that the subjects interviewed most recently after their treatment (the Taiwan group) based their dissatisfaction in terms of continuing symptoms. In contrast, Pattison's subjects, who claimed to have been healed by an event that occurred on the average 15 years previously, denied the importance of symptom reduction as a criterion for evaluating healing. Thus the time factor itself may be in part responsible for the differing perspectives on healing described in these two studies.

Conclusions drawn from retrospective studies provide valid descriptions of the impact people *ascribe* to healing rituals, but an important unanswered question in these studies is whether the treatment itself or other processes operating since the treatment are responsible for the patients' sense of satisfaction/

dissatisfaction which is subsequently attributed to the indigenous treatment. One possible way to manage this issue would be to obtain a longitudinal series of *emic* and *etic* health assessments previous to treatment, as well as during and following treatment. In addition, it would be necessary to monitor other strategies that the patient might employ to cope with his illness.

There is also a need to examine the alleged relationship between patients' expectations about treatment and their subsequent sense of satisfaction. A psychological state described as "expectant trust" [60] or "expectancy of help" [37] has been linked theoretically with favorable treatment outcomes in the context of non-medical treatments. Within a hospital setting, this concept has been operationalized and related positively to the speed of healing after operations for detached retina [61]. There have been very few field studies of healing, however, that have actually obtained information about patient expectations prior to their treatment. I am aware of only four outcome studies of non-Western therapies that present any pretreatment information about a sample of patients [8, 52, 62, 63]. In each of these studies the pretreatment data is based on health status assessments derived from a Western medical perspective, but the authors include no information on what the patients expected from their impending treatments. There is clearly a need for further investigation in this area [64].

The research issues outlined above deserve further attention, but an exclusive focus on participants' assessments of healing practices has, I believe, at least two basic difficulties. First, posttreatment reports by patients are frequently positive because there are often strong social constraints against criticism of healing rituals/personnel, compounded by the general euphoria often experienced by audience and ill persons alike. These factors may also operate for sometime after the healing event. During my work in Newfoundland, for example, church members rarely spoke disparagingly about healing rituals or their religious experiences; positive accounts of the benefits of church participation were always easy to find. Evidence for dysphoric experience associated with religious activity was obtained primarily by using a structured interview which was *not* viewed as an assessment of the respondent's church activities.

Unfortunately, etically-derived outcome data from studies of indigenous healing practices have often been based on (undefined) field observations or clinical judgments [8, 49, 62]. While this research has made a substantial contribution, the replication of these efforts and assessments of their validity are difficult to make. In comparison, outcome studies of health/mental health care in the West have obsessed over issues of instrument validity and reliability, much to the neglect of the observation of behavior in natural settings. The instruments that have been developed from these studies can provide a rich source of measurement options and ideas for anthropologists and psychiatrists working in other cultural settings [67-73]. Most importantly, such instruments may provide an objective evaluation of informants' claims and researchers' field observations. The validity of

subsequent research conclusions would be greatly strengthened and the reliability of the conclusions could be checked by further research using the same measurement procedures.

The second research difficulty encountered at the emic level is that investigators may disregard healing influences operating outside the formal healing ritual. That is, when the study of healing is guided primarily by a focus on the reported therapeutic value of ritual behavior by participants [74], the healing impact of factors less easily observed in time and space may be overlooked. There has been, for example, a strong interest in the potential healing effects of altered states of consciousness, involving behaviors and techniques of induction commonly found in many curing ceremonies. Relatively little attention has been paid to how these altered states of consciousness (or other ceremonial procedures) may serve to re-align, strengthen, or initiate therapeutic social relationships between the patient and significant others. While the interdependence between social networks and social stress has been implicated in the onset and course of a variety of illnesses in industrialized settings [75, 76], these findings have not informed anthropological research designed to evaluate indigenous healing practices.

There is strong ethnographic evidence to suggest, however, that the "diagnosis" and re-alignment of anxiety-provoking and conflictual interpersonal relationships are the fundamental healing arts practiced with consummate skill by indigenous healers [22, 77, 78]. Turner's classic case analysis of an Ndembu doctor's practice is particularly instructive because the report clearly shows how the doctor's assistance proceeds from a careful assessment of the patient's position within a web of intravillage animosities. Ritual bloodlettings, confessions, purification, tooth-drawings and dissociation by the patient were all part of the curing ceremonies but, as Turner reports, the doctor's "main endeavor was to see that individuals were capable of playing their social roles successfully in a traditional structure of social position" [79, p. 262]. As a result, the patient, who presented with a variety of debilitating physical symptoms, improved dramatically. A research focus on one or more of the ceremonial activities in this curing situation would have overlooked the basic source of the doctor's successful healing efforts.

This point is further emphasized in a recent evaluation of a pentecostal church program offering crisis services to homosexual persons. The authors report that a significant factor in the religiously-mediated change of eight homosexuals to a successful heterosexual life-style was the ongoing "interpersonal experience, behavioral rehearsal, and behavioral practice" within the church, rather than any specific healing ritual(s) or conversion experiences sought by the men [80]. Therapeutic activities such as these may or may not be brought to the researcher's attention by informants. Thus, the identification and evaluation of such activities depends on an etic framework employed by the researcher.

One relevant development here is the refinement of social network theory. This extensive body of work [81] indicates that an individual's social matrix may be pathological or therapeutic and provides methodo-

logical approaches to the assessment of these matrices and their changing structure over time.

The measurement of patients' social relations before and after indigenous treatment could disclose what types of healers/treatment have the most impact on patients' interpersonal relationships and how those changes are related to patients' "improvement". Waxler [56] has argued, for example, that the rapid recovery of schizophrenics in Sri Lanka may be due in part to the cohesive nature of the extended family. Patients' perceptions of support from this group, as well as the role of native healers in creating social support, clearly needs investigation in this and other field settings. Presumably some healers, such as herbalists, have little or no impact on a patient's social matrix while others, such as *Curanderos* and *Espiritistas*, may substantially re-arrange patients' social relationships [24, 78], or function themselves as primary social supports [82]. Information of this kind could be helpful in discussions concerning the advisability of integrating indigenous healers within cosmopolitan health care systems.

There are many other research issues that could be raised here, not the least of which is the need to integrate assessments of *materia medica* and the psychosocial impact of indigenous healing practices [51]. It should be clear, however, that anthropological assessments of indigenous healing practices have moved one hundred and eighty degrees from early ethnographic preoccupations with distinctions between magic, science, and religion. While the basic research questions are now relatively well-known [52], existing methodological strategies for obtaining trustworthy answers have not been widely adopted in field research. When this adoption occurs, evaluation studies may well become the most sophisticated research branch of medical anthropology.

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#### REFERENCES

1. Opler M. E. Some points of comparison and contrast between the treatment of functional disorders by Apache shamans and modern psychiatric practice. *Am. J. Psychiat.* **92**, 1371, 1936.
2. Leighton A. H. and Leighton D. C. Elements of psychotherapy in Navaho religion. *Psychiatry* **4**, 515, 1941.
3. Kiev A. The psychotherapeutic value of spirit-possession in Haiti. In *Trance and Possession States* (Edited by Prince R.). R. M. Bucke Memorial Society, Montreal, 1963.
4. Murphy J. M. Psychotherapeutic aspects of shamanism on St. Lawrence Island, Alaska. In *Magic, Faith, and Healing* (Edited by Kiev A.). The Free Press, New York, 1964.
5. Hamer J. and Hamer I. Spirit possession and its psychological implications among the Sidamo of Southeast Ethiopia. *Ethnology* **5**, 392, 1966.

6. Kennedy J. G. Nubian Zar ceremonies as psychotherapy. *Hum. Org.* 26, 185, 1967.
7. Spiro M. E. *Burmese Supernaturalism*. Prentice-Hall, New Jersey, 1967.
8. Jilek W. G. *Salish Indian Mental Health and Culture Change*. Holt, Rinehart & Winston, Toronto, 1974.
9. Malinowski B. Magic, science and religion. In *Science, Religion and Reality* (Edited by Needham J.). Macmillan, London, 1925.
10. Lowie R. *Primitive Religion*. Boni & Liveright, New York, 1924.
11. Radin P. *Primitive Man as Philosopher*. Dover, New York, 1927.
12. Hallowell A. E. Psychology and Anthropology. In *For a Science of Social Man* (Edited by Gillin J.). Macmillan, New York, 1954.
13. Geertz C. Religion as a cultural system. In *Anthropological Approaches to the Study of Religion* (Edited by Banton M.). Tavistock, London, 1966.
14. Spiro M. E. Religion: problems of definition and explanation. In *Anthropological Approaches to the Study of Religion* (Edited by Banton M.). Tavistock, London, 1966.
15. Wallace A. F. *Religion: An Anthropological View*. Random House, New York, 1966.
16. Glick L. The anthropology of religion: Malinowski and beyond. In *Beyond the Classics? Essays in the Scientific Study of Religion* (Edited by Glock C. Y. and Hammond P. E.). Harper & Row, New York, 1973.
17. Sociologists, in comparison, have not developed this perspective. While discussion has focused increasingly on the multi-dimensional nature of religiosity [18], there has not been a tradition of research in sociology which has examined the consequences of religious involvement for individual's psychological well-being [19].
18. Demerath III N. J. and Roof W. C. Religion recent strands of research. *Ann. Rev. Sociol.* 2, 19, 1976.
19. Ploch D. R. Religion as an independent variable: a critique of some major research. In *Changing Perspectives in the Scientific Study of Religion* (Edited by Eister A. W.). Wiley, New York, 1974.
20. Radcliffe-Brown A. R. Taboo. In *Structure and Function in Primitive Society*. Cohen & West, London, 1952. (Originally published in 1939).
21. Mischel W. and Mischel F. Psychological aspects of spirit possession. *Am. Anthropol.* 60, 249, 1958.
22. Prince R. Indigenous Yoruba psychiatry. In *Magic, Faith, and Healing* (Edited by Kiev A.). Free Press of Glencoe, Macmillan, New York, 1964.
23. Pattison E. M., Lapins N. A. and Doerr H. A. Faith healing: a study of personality and function. *J. Nerv. ment. Dis.* 157, 397, 1973.
24. Koos J. D. Social process, healing, and self-defeat among Puerto-Rican spiritists. *Am. Ethnol.* 4, 453, 1977.
25. Snow L. F. Sorcerers, saints and charlatans: black folk healers in urban America. *Cult., Med. & Psychiat.* 2, 69, 1978.
26. Torrey E. F. *The Mind Game: Witchdoctors and Psychiatrists*. Emerson Hall, New York, 1972.
27. This emphasis on the beneficial aspects of indigenous healing activities may reflect a characteristic of many anthropologists. Based on data derived from a survey of 101 ethnographies [28], it has been argued that ethnographers, sharing a "bias of romanticism" or inclination to describe their hosts' social institutions in positive terms, may easily overlook negative features of informants' social practices unless multiple measurement procedures are used.
28. Rohner R., DeWalt B., and Ness R. C. Ethnographer bias in cross-cultural research: an empirical study. *Behavior Sci. Notes* 8, 275, 1973.
29. Kennedy J. G. Cultural psychiatry. In *Handbook of Social and Cultural Anthropology* (Edited by Honigman J. J.). Rand McNally, Chicago, 1973.
30. Kleinman A. International health care planning from an ethnomedical perspective: critique and recommendations for change. *Med. Anthropol.* 2, 71, 1978.
31. Prince R. H. Psychotherapy as the manipulation of endogenous healing mechanisms: a transcultural survey. *Transcult. Psychiat. Res. Rev.* 13, 115, 1976.
32. Faris J. C. *Cat Harbour*. Univ. Toronto Press, Toronto, 1972.
33. Wadel C. Marginal adaptations and modernization in Newfoundland. In *Newfoundland Social and Economic Studies No. 7*. Institute of Social and Economic Research, St John's, Newfoundland, 1969.
34. Wadel C. Now, *Whose Fault is That? The Struggle for Self-Esteem in the Face of Chronic Unemployment*. Univ. Toronto Press, Toronto, 1973.
35. Ness R. C. Illness and adaptation in a Newfoundland Outport. Doctoral dissertation, University of Connecticut. Field research was conducted continuously from May 1973 until June 1974.
36. Ness R. C. Modernization and illness in a Newfoundland community. *Med. Anthropol.* 1, 25, 1977.
37. Frank J. D. *Persuasion and Healing. A Comparative Study of Psychotherapy*. Johns Hopkins Univ. Press, Baltimore, 1973. (Originally published in 1961).
38. Two other reasons for selecting this group for study should also be mentioned. Based on close observation in a community context, none of the members of the church displayed severe psychiatric symptomatology. Moreover, this church was a well-accepted group within the community, not perceived as a radical sect nor acting as such in order to attract or hold members. These two conditions increased my opportunity to study the relationship between religious involvement and emotional distress within a "normal" population not subject to internal or external pressures associated with minority evangelical sects.
39. Brodman K., Erdman A. J. and Wolff H. G. *Cornell Medical Index Health Questionnaire Manual*. Cornell Univ. Medical College, New York, 1949.
40. White K. L. Contemporary epidemiology. *Int. J. Epidemiol.* 3, 295, 1974.
41. Carlyle M. L. A study of glossolalia and related phenomena in non-Christian religions. *Am. Anthropol.* 58, 75, 1956.
42. Prince R. H. The problem of "spirit possession" as a treatment for psychiatric disorders. *Ethos* 2, 315, 1974.
43. Bourguignon E. Review of case studies in spirit possession. *Am. Ethnol.* 5, 186, 1979.
44. Tellegen A., Gerrard N. L., Gerrard L. B. and Butcher J. N. Personality characteristics of members of a serpent-handling religious cult. In *MMPI: Research Developments and Clinical Applications* (Edited by Butcher J. N.). McGraw-Hill, New York, 1969.
45. Galanter M. and Buckley P. Evangelical religion and meditation: psychotherapeutic effects. *J. Nerv. ment. Dis.* 166, 685, 1978.
46. Kleinman A. *Patients and Healers in the Context of Culture*. Univ. California Press, Berkeley, 1980.
47. Galanter M., Rabkin R., Rabkin J., and Deutch A. The Moonies: a psychological study of conversion and membership in a contemporary religious sect. *Am. J. Psychiat.* 136, 165, 1979.
48. It appears, for example, that many of the symptoms characteristic of *susto* in Latin America [29, pp. 1164-1165] and anomic depression among the Salish Indians in Canada [8] are similar to Frank's formulation of demoralization. As might be expected, these two conditions are reported to be successfully relieved by indigenous treatment in their respective cultural settings.



49. Kiev A. (Ed.) *Magic, Faith, and Healing. Studies in Primitive Psychiatry Today*. Free Press, New York, 1964.
50. Fabrega H. Jr. Dynamics of medical practice in a folk community. *Milbank mem. fund. Q.* **48**, 391, 1970.
51. Etkind N. (Guest E.) Biomedical evaluation of indigenous medical practices. *Med. Anthropol.* **3**, 393, 1979.
52. Kleinman A. and Sung L. H. Why do indigenous practitioners successfully heal? *Soc. Sci. Med.* **138**, 7, 1979.
53. Kleinman A., Eisenberg L. and Good B. Culture, illness and care. *Ann. intern. Med.* **88**, 251, 1978.
54. W.H.O. Traditional medicine—views from the South-East Asia regions. *WHO Chron.* **31**, 47, 1977.
55. W.H.O. *Chron. op. cit.*, 1977.
56. Waxler N. Is outcome for schizophrenia better in nonindustrial societies? *J. Nerv. ment. Dis.* **167**, 144, 1979.
57. Good B. The heart of what's the matter: the semantics of illness in Iran. *Cult., Med. Psychiat.* **1**, 25, 1977.
58. Kane R. L. et al. Manipulating the patient: a comparison of the effectiveness of physician and chiropractor care. *Lancet* **1**, 1333, 1974.
59. Cay E. L. et al. Patient's assessment of the result of surgery for peptic ulcer. *Lancet* **1**, 29, 1975.
60. Weatherhead L. D. *Psychology, Religion, and Healing*. Abingdon-Cokesbury Press, New York, 1951.
61. Mason Jr. R. C. et al. Acceptance and healing. *J. Religion Hlth* **8**, 123, 1969.
62. Harding T. Psychosis in a rural West African community. *Soc. Psychiat.* **8**, 198, 1973.
63. Levy J., Neurta R. and Parker D. Life careers of Navajo elipeptics and convulsive hysterics. *Soc. Sci. Med.* **138**, 53, 1979.
64. Recent work in social psychology, applying "attribution theory" to the psychology of religious experience may be useful in future efforts to understand the role of patient expectations. Empirical research indicates that the symbolic environment of a religious setting interacts with an individual's understanding about what will happen to himself in that setting. Some individuals may be unwilling or unable to adopt the labelling and interpretations of experience ("attributions") provided by the religious setting so that a religious conversion, for example, is not possible [65, 66]. Formal features of attribution theory may be adopted in order to clarify pre-treatment and treatment variables that explain why some individuals experience neutral or even toxic effects following involvement in indigenous healing practices.
65. Bowker J. *The Sense of God*. Oxford Univ. Press, Oxford, 1973.
66. Proudfoot S. and Shaver P. Attribution theory and the psychology of religion. *J. scient. Study Relig.* **14**, 317, 1976.
67. Guy W. et al. A controlled evaluation of day hospital effectiveness. *Archs gen. Psychiat.* **20**, 329, 1969.
68. Herz M. et al. Day versus inpatient hospitalization: a controlled study. *Am. J. Psychiat.* **127**, 107, 1971.
69. Michaux M. H. et al. Postrelease adjustment of day and full-time psychiatric patients. *Archs gen. Psychiat.* **29**, 647, 1973.
70. Buell G. and Anthony W. The relationship between patient demographic characteristics and psychiatric rehabilitation outcome. *Commun. ment. Hlth J.* **11**, 208, 1975.
71. Fontana A. F. and Dowds B. N. Assessing treatment outcome. *J. Nerv. ment. Dis.* **161**, 221, 1975.
72. Washburn S. and Vannicelli M. A controlled comparison of psychiatric day treatment and inpatient hospitalization. *J. Consult. Psychol.* **44**, 665, 1976.
73. Penk W. E., Charles H. L. and Van Hoose T. A. Comparable effectiveness of day hospital and inpatient psychiatric hospitalization. *J. Consult. clin. Psychiat.* **46**, 94, 1978.
74. McCreery J. L. Potential and effective meaning in therapeutic ritual. *Cult., Med. Psychiat.* **3**, 53, 1979.
75. Cobb, S. Social support as a moderator of stress. *Psychosom. Med.* **38**, 300, 1976.
76. Kaplan B. H. et al. Social support and health. *Med. Care* **14**, 47, 1977.
77. Fox R. Witchcraft and clanship in Cochiti therapy. In *Magic, Faith, and Healing* (Edited by Kiev A.). Free Press of Glencoe, Macmillan, New York, 1964.
78. Madsen W. Value conflicts and folk psychotherapy in South Texas. In *Magic, Faith, and Healing* (Edited by Kiev A.). Free Press of Glencoe, Macmillan, New York, 1964.
79. Turner V. W. An Ndembu doctor in practice. In *Magic, Faith, and Healing* (Edited by Kiev A.). Free Press of Glencoe, Macmillan, New York, 1964.
80. Pattison E. M. and Pattison M. L. Ex-gays: Religiously mediated change in homosexuals. Paper presented at 132nd Annual Scientific Meeting of the American Psychiatric Association, Chicago, 1979.
81. Pattison E. M. A theoretical-empirical base for social system therapy. In *Current Perspectives in Cultural Psychiatry* (Edited by Foulks E. et al.).
82. Garrison V. Support systems of schizophrenic and non-schizophrenic Puerto Rican women in New York City. *Schizophrenia Bull.* **4**, 561, 1978.

## SOMA: AN ATTEMPT TO CLASSIFY THE PLANT AND THE DRUG [1]

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**Abstract**—Soma was an exhilarating drink made from a plant of the same name. It was the essence of the sacrifice which was the focus of early Vedic religion, yet nowhere in the Vedic literature is a clear description of the plant to be found. Various attempts have been made to identify Soma, the most recent by Wasson (1968), who argued that it was *Amanita muscaria*. Some of his arguments are disputed. The hymns of the *Rig-Veda* demonstrate that Soma was an hallucinatory stimulant, but all that we learn of the appearance of the plant is that it had stalks. On the other hand, details of the process of preparing the Soma drink are given in the *Rig-Veda*, and from the method of manufacture an attempt is made to narrow the limits of classification of the drug. This shows that Soma was probably a golden coloured, volatile oil expressed and washed out of the plant stalks with water. The oil was then separated from the water by filtration through a sheepskin, mixed with milk, then drunk by the priests and offered to the gods.

In the history of medicine, Soma is a symbol of man's unchanging and intense interest in the use of plants for their therapeutic and psychological effects on the body and mind. This paper is particularly relevant to the comparative study of medical traditions, as it brings us one step closer towards the identification of the legendary drug worshipped and praised and used by the Aryan people when first they came, with their Vedic religion and hymns, into the fertile valleys of Northern India over 3000 years ago. There has long been debate about the identity of the plant Soma, and the kind of drug it produced. Here, we start, not by trying to fit a supposed Soma into the hymns, but by drawing from the hymns as much information as we can, and by stating what the hymns tell us about the plant and the drug.

The ritual of the *Rig-Veda* revolved around Soma. The focus of early Vedic religion was the sacrifice, and the essence of the sacrifice was Soma. Soma was the most important and most frequent sacrificial offering. Soma was an exhilarating drink made from a plant of the same name. It was made at the place of sacrifice, immediately prior to the sacrifice, for the consumption of the attending priests and for the gods.

Of the one thousand and more hymns of the ten books of the *Rig-Veda*, more than one tenth of them, including the entire contents of Book Nine, are hymns about Soma. Surprisingly, nowhere in the *Rig-Veda* nor in any of the Vedic literature is a clear description of the Soma plant to be found.

Several people have suggested the type of drug Soma might have been, or names of plants which may have produced it. The plant itself has been variously identified as Acid Asclepias or Sarcostema Viminalis [2], *Ephedra pachyclade*, also known as hum, humma, and yahma [3], "some kind of Ephedra, probably *Ephedra distachya*" [4], also rhubarb [5]. Amongst other proposals are millet; and bhāṅg (from cannabis) [6]. The drink, too, has been variously described as intoxicating [7], narcotic, exhilarating [8], stimulant and alcoholic [9].

The most recent attempt to identify Soma was made by R. G. Wasson, who, in his interesting book, *Soma: Divine Mushroom of Immortality*, argues his case in great detail. Wasson declares Soma to be a psychotropic plant [10] and states—"My candidate for the identity of Soma is *Amanita muscaria*, (Fr. ex L.) Quél, in English the fly-agaric, . . . the brilliant red mushroom with white spots familiar in forests and folklore throughout northern Eurasia" [11].

Considering the progress made in recent years in our understanding of the action of drugs, it should be possible to classify the type of drug used by the Vedic priests, which they called Soma. The information required to do this should be there, in the hymns of the *Rig-Veda*. Was Soma intoxicating, narcotic, exhilarating, or alcoholic? What do these words mean?

To intoxicate etymologically means to poison. It also means to stupefy, render unconscious or delirious, to madden or deprive of the ordinary use of the senses or reason, with a drug or alcoholic liquor. Commonly, it means to inebriate or make drunk [12]. To revert to the literal meaning of intoxicate, a poison is a drug which is a potential killer. Many of our most useful drugs are poisons. Such drugs, when taken in doses within certain limits, produce the desired effects. In smaller quantities they either have different effects from these, or are ineffective. When taken in larger quantities they have undesirable effects, and beyond this, they are lethal.

A narcotic induces drowsiness, sleep or insensibility according to its strength and the amount taken [13].

To exhilarate means to make cheerful or merry, to cheer, enliven, gladden [14]. To stimulate is to excite an organ to its specific activity or to increased activity [15].

Wasson uses the term "a psychotropic plant". Psychotropic is a description with a very wide connotation. Broadly, it can mean anything from a sedative to a stimulant or a tranquillizer [16].

What effect did Soma have on the priests and on the gods? The obscurity of the Rig-Vedic hymns, the

deification of Soma and the mysticism of the ritual combine to encourage a wide range of interpretations of some of the passages. Despite this, the essential nature of the effects of Soma is made clear by constant repetition [17].

Soma is welcomed as a friend of all men, bringing joy and gladness. It gives courage, power and strength. It clarifies the mind and inspires speech. It cures sickness and it kills the wicked. It enables men to commune with the gods. In short, it gives them a marvellous feeling and they like it [18].

Although some drugs specifically produce changes in mood and thinking, such effects may also be attributed to toxic doses of a large number of substances [19]. The lesser effects are more likely to give an indication of the properties of Soma as distinct from other drugs. These effects are not those of a narcotic. There is no indication of drowsiness resulting from drinking Soma. Neither are they those of alcohol. A person suffering from acute alcoholic intoxication is stuporous and comatose. In small doses, alcohol depresses the activity of the central nervous system and impairs the higher faculties, including judgement and coordination [20]. Rather, these effects seem to be those of exhilaration and stimulation and, in excess, of intoxication.

As the number of stimulants which are intoxicating in excessive quantities is quite large, little can be gained by trying to name Soma from this evidence. It is necessary to find a plant which fits the description in the hymns and also produces a stimulating substance. Amongst natural preparations which produce some degree of hallucination are hashish, opium, peyote, coca leaves, cohoba, iboya bean, betel(areca) nut, kava kava and extracts from such fungi as *Amanita muscaria* and *Amanita pantheuna*. These are referred to by specialists as psychotomimetics [21].

The Soma plant is mentioned in the hymns of the *Rig-Veda* only in the context of the sacrifice itself. In many instances it is impossible to come to any firm conclusion about the intention of the meaning. There is little to indicate whether particular words refer to ritual or reality... a god or a plant. Metaphor becomes lost in mysticism, but certain constant impressions, nevertheless, are sensed by the reader.

While remarkably little is said of the Soma plant itself, most of the hymns of Book Nine of the *Rig-Veda* tell us something of the actual process of preparing the Soma drink. By determining the method used to manufacture Soma, we should be able to narrow the limits of classification of the drug. In this way, a large number of plants can be excluded from the long list of possibilities.

How was Soma made? The stalks were laid on an ox-hide [22]. They were washed with water [23] and the liquid contents of the stalks were expressed by crushing them with stones and pressing them [24]. The picture which emerges is one of great activity and noise, with many hands at work beating the stalks with the stones.

It seems that Soma was a volatile oil. "Thy drops that swim in water..." (RV. ix, 106.8) [25]. The oil bearing cells of the epidermis of the stalks of the plants were burst by the crushing action of the stones. The water sprinkled on the stalks washed out the oil [26] and the resulting liquid foamed forth [27]. The

unfiltered, watery juice was tawny coloured [28] and the "speckled sap" [29] was "decked with tints" [30]. Oil is lighter than water, and the oily droplets tended to agglomerate and float to the surface of the river of juice [31].

Soma had a strong, sweet odour [32] and a pleasant, very sweet flavour [33]. "While flowing, meet for sacrifice, he hath gone up to heaven across the regions, irresistible" [34]. These words might refer to the vapour rising from the extracted liquid, which sparkled with its oily content, the Soma drops [35].

The stream flowing from the press was led into a filter. The filtration process assumed a magical quality. Soma is called *Pavamāna*, self purifying, and its self purification occurred when the extracted liquid was filtered [36]. The Soma was manipulated through the filter by the hands of men [37]. Its separation from the juices was likened to the rain bursting through the clouds [38], "...and he will burst the water holding cask of heaven". The Soma emerged from the filter as brilliant as the sun [39]. The oily drops of Soma passed through the filter, but the watery fluid did not [40].

How did this miracle occur? The filter which has been generally interpreted as made of woollen cloth, seems to us to have been a sheepskin, woollen side up. "Through tangles of the wool he flows..." (RV. ix, 106.13) [41]. This is more consistent with the Sanskrit of the original which sometimes refers to the filter with the word *carma*.

It was not a simple process of straining the liquid from the debris of the crushed stalks. Such a process does not warrant the lengths to which the poets went to describe it. They were trying to convey a mystery which they could not explain. The liquid which emerged from the filter had purified itself. It had changed its colour and its texture. It was no longer tawny coloured, it was golden, like the sun [42]—it was no longer fast flowing, and speckled with glistening particles, it emerged as oily drops.

It did not pass easily through the filter, but required the help of the hands of men, pressing and squeezing the sheepskin, thus hastening its progress. By the process of filtering the mixture of oil and watery fluid obtained from the stalks of the Soma plant, through the sheepskin, the oily Soma drug was separated (see Appendix).

If the plant was rich in proteolytic enzymes, these would have been capable of clotting the milk with which the bright, golden Soma was mixed in the vats. The milk is sometimes referred to as curds [43]. Why was Soma mixed with milk? Was it to make it palatable because it was too strong to drink alone? Was it to reduce its toxicity by hindering its absorption in the alimentary tract, or was it to neutralize a rather acid preparation, in order to prevent nausea and gastric irritation?

These questions can only be answered when we know what the plant was. It would then be possible to test the manufacturing process and the resultant preparations.

In the description of the plant, the word used is stalks [44]. Despite Wasson's contention that it is a small plant [45], the hymns refer to it as *Vanaspati* [46] which has several meanings, including "lord of

the wilds", a large plant and a tree. It can also mean a large tree bearing fruit without blossoms.

We cannot rely on the colour terms used in the *Rig-Veda* for an accurate description of the plant. The word *hari* can mean any reddish hue from brown to yellow, from fresh coloured to green, and it is doubtful whether, at the time of the composition of the *Rig-Veda*, the Aryan people had exact words for green or yellow colours [47].

Nor can we rely on Wasson's argument that *Amanita muscaria* is the only plant "in the traditions of Eurasia" which causes the excretion in the urine of a psychotropic metabolite [48]. This phenomenon is by no means unique: cannabis is a very ancient psychotropic drug of Eurasian origin, the active principle of which is excreted in the urine as a glucuronide conjugate, after oral administration. It is also capable of producing toxic psychosis with auditory and visual hallucinations, though it is a narcotic [49]. Another such plant is opium [50]. The list is extensive.

Where did Soma come from? The hymns do not make it clear when they are referring to fact and when they are referring to ritual. Most authorities agree that it grew upon the mountains [51]. Some identify the mountain as Mt Mūjavant [52]. Some interpret these phrases as referring to the ritual. Macdonell says "Soma is in several passages said to grow or dwell on the mountains, but his true origin and abode are thought to be in heaven" [53]. Most agree that it was connected with water. Born of the waters; Lord and king of streams; father or son of the waters; the waters are its mother or sisters. It grows in the waters [54]. From these references, one possible interpretation is that Soma grew in mountain streams.

The Soma sacrifice was not a rare occurrence. Soma was prepared and drunk very frequently, and this seems to imply an abundance of the plant. "The streams that never fail or waste, flow forth like showers of rain from heaven." [55]

How it was obtained is not mentioned, except for the ceremonial buying of the Soma during the performance of the ritual. It was there bought with Speech or in its place, with a young cow [56].

It is possible that the Aryan people, like many others, made an alcoholic drink from a common plant which was rich in carbohydrates, probably sugars. It is possible that in the process they found the unfermented juice even more potent than alcohol and they ceased using the fermentation process. This could explain why they did not prepare Soma in large quantities in advance of each sacrificial ceremony.

In conclusion, it is apparent that the Soma plant cannot be identified from information obtained from Book Nine of the *Rig-Veda*. However, certain facts are evident which limit the classification of the plant and the drug prepared from it. The drug Soma was a volatile oil. It was a bright golden colour and had a strong, sweet odour and pleasant, sweet flavour. Because of an unknown, unpleasant effect, it was taken mixed with milk. It had a stimulating effect, and in excessive amounts caused toxic psychosis. Soma was prepared from the stalks of the plant, which were moistened with water and crushed with stones. The expressed oil was then separated from the liquid by selective filtration through a sheepskin.

## APPENDIX

### The filtration of Soma

It has generally been accepted that the filter used in the preparation of Soma was made of woollen cloth, but the literal interpretation is that the filter was a sheepskin. Soma appears to have been an oil. If this is so, the following two simple experiments show that it was possible for Soma to have been separated from the juices of the plant by filtration through a sheepskin.

The separation of an oil from an aqueous system should be possible using a membrane which is hydrophobic and lyophilic. An untanned sheepskin has these properties.

The separating properties of untanned sheepskin, with wool attached, were tested. A mixture of eucalyptol and water was poured on to the woolled side of a piece of sheepskin and allowed to stand. After 2 days the skin became saturated with oil and the oil started to pass slowly through the skin. Once the skin had become saturated with oil, the separation process could be repeated without delay. It could also be hastened by squeezing the skin.

A piece of the sheepskin which was already saturated with oil, supported by a stainless steel support screen, was inserted as filter in a small, stainless steel pressure filtration cell. (The design of the cell was similar to that of pressure cells available commercially from Millipore.) Eucalyptol and water were mixed and the mixture poured into the cell, which was then mounted in a horizontal position. This was to ensure that both oil and water were in contact with the membrane, as under these conditions they would separate into two layers. When a gas pressure of 200 cm water was applied to the mixture of oil and water, oil appeared through the membrane but no water.

It was therefore concluded that untanned sheepskin has properties which permit the separation of eucalyptol from water. From this it can be inferred that other oils can be separated from watery suspensions by means of a membrane of untanned sheepskin [57].

## REFERENCES

1. Drug:- an original, simple, medicinal substance, organic or inorganic, whether used by itself in its natural condition or prepared by art, or as an ingredient in a medicine or medicament. *The Oxford English Dictionary*.
2. Griffith R. T. H. (Translation), *The Hymns of the Rigveda*, 5th edn, Vol. I, p. 2. The Chowkhamba Sanskrit Series Office, Varanasi, 1971.
3. *Ibid*.
4. *Ibid*.
5. Wasson R. G. *Soma: Divine Mushroom of Immortality*, p. 16. Mouton, Hague, 1968.
6. Keith A. B. *The Religion and Philosophy of the Veda and Upanishads* p. 172. Motilal Banarsidass, Delhi, 1970.
7. *Ibid*.
8. Bloomfield M. *The Religion of the Veda*, p. 147. AMS Press, New York, 1969.
9. Wasson, *op. cit.* p. 16.
10. *Ibid.*, p. 5.
11. *Ibid.*, p. 10.
12. *The Oxford English Dictionary*.
13. *Ibid*.
14. *Ibid*.
15. *Ibid*.
16. *Martindale: The Extra Pharmacopoeia*, 26th edn, p. 1805. The Pharmaceutical Press, London, 1972.
17. The translation referred to here is that of R. T. H. Griffith.
18. Macdonell A. A. (Translation) *Hymns from the Rigveda*, Vol. VIII, pp. 79-81. Association Press, Calcutta (no date). Griffith, RV. ix, 4; 6; 7; 8.



19. Goodman L. S. and Gilman A. *The Pharmacological Basis of Therapeutics*, 4th edn, p. 194. Macmillan, New York, 1970.
20. Martindale, p. 45.
21. *Van Nostrand's Scientific Encyclopedia*, 4th edn, p. 1431. Van Nostrand, Princeton, 1968.
22. RV. ix, 79.4; 101.11.
23. *Ibid.*, 62.5; 72.4.
24. *Ibid.*, 16.1; 34.3; 71.3; 80.4.
25. *Ibid.*, 16.3; 80.2; 82.1; 86.37; 86.45.
26. *Ibid.*, 80.5; 86.44; 109.21.
27. *Ibid.*, 1.6.
28. *Ibid.*, 3.9; 34.4.
29. *Ibid.*, 16.1.
30. *Ibid.*, 34.4.
31. *Ibid.*, 106.8; 107.14; 108.7.
32. *Ibid.*, 97.19; 98.12; 107.2.
33. *ibid.*, 63.19; 97.14; 110.11.
34. *Ibid.*, 3.8.
35. *Ibid.*, 61.18; 66.25; 86.45.
36. *Ibid.*, 42.4.5.
37. *Ibid.*, 28.1.4; 38.3; 107.17; 110.10.
38. *Ibid.*, 71.1; 74.7; 88.6.
39. *Ibid.*, 71.2; 71.9; 86.32; 97.15; 108.12.
40. *Ibid.*, 38.5; 42.4; 71.2; 97.56.
41. *Ibid.*, 74.9; 86.3; 86.47; 91.3; 97.11,12; 97.56.
42. *Ibid.*, 86.32.
43. *Ibid.*, 11.6; 81.1.
44. *Ibid.*, 62.4; 67.28; 74.2.
45. Wasson, *op. cit.* p. 14.
46. RV. ix, 5.10.
47. Berlin B. and Kay P. *Basic Colour Terms*, p. 104. University of California Press, Berkeley, 1969.
48. Wasson, *op. cit.* p. 32.
49. Goodman and Gilman, p. 299.
50. Martindale, p. 1103.
51. Keith A. B. *The Religion and Philosophy of the Veda...*, p. 169. Bloomfield, p. 145. Macdonell, p. 78.
52. Keith, *ibid.*
53. Macdonell, p. 78.
54. Keith, *The Religion and Philosophy of the Veda...*, p. 171.
55. RV. ix, 57.1.
56. Keith A. B. (Translation) *Rigveda Brahmanas*, p. 128. Motilal Banarsidass, Delhi, 1971.
57. I am greatly indebted to Emeritus Professor A. L. Basham for his advice and encouragement in the preparation of this paper, and to Dr D. Smiles of CSIRO for his kind assistance with the second experiment.

## BIBLIOGRAPHY

- Berlin B. and Kay P. *Basic Colour Terms: Their Universality and Evolution*. University of California Press, Berkeley, 1969.
- Bloomfield M. *The Religion of the Veda*. AMS Press, New York, reprint of 1908 edn, 1969.
- Goodman L. S. and Gilman A. *The Pharmacological Basis of Therapeutics*, 4th edn. Macmillan, New York, 1970.
- Griffith R. T. H. (Translation) *The hymns of the Rigveda*. 2 Volumes, 5th edn. The Chowkhamba Sanskrit Series Office, Varanasi, 1971.
- Keith A. B. *The Religion and Philosophy of the Veda and Upanishads*. The Harvard Oriental Series, Vol. 31. Motilal Banarsidass, Delhi, 1970.
- Keith A. B. (Translation) *Rigveda Brahmanas*. The Harvard Oriental Series, Vol. 25. 1st Indian reprint edn. Motilal Banarsidass, Delhi, 1971.
- Macdonell A. A. (Translation) *Hymns from the Rigveda*. Association Press, Calcutta (no date).
- Martindale: *The Extra Pharmacopoeia*, 26th edn. The Pharmaceutical Press, London, 1972.
- The Oxford English Dictionary*.
- Van Nostrand's Scientific Encyclopedia*, 4th edn. Van Nostrand, Princeton, 1968.
- Wasson R. G. *Soma: Divine Mushroom of Immortality*. Mouton, The Hague, 1968.

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## BOOK REVIEWS

**Organism, Medicine, and Metaphysics: Essays in Honor of Hans Jonas on his 75th Birthday, May 10, 1978**, edited by STUART F. SPICKER. "Philosophy and Medicine", Vol. 7, Reidel, Dordrecht, 1978. 330 pp. \$24.50

It is not inappropriate that a *Festschrift* dedicated to Hans Jonas should appear in the collection on "Philosophy and Medicine". It is he, perhaps more than anyone else, who has not only contributed to this newly emerging field of philosophy in its earliest stages, but also done most to set it on the highest plain of philosophical reflection. Through his work on *The Phenomenon of Life* (published in 1966), he laid out a solid foundation for this reflection; and since then he has gone on to investigate the problems of technology itself as well as the problems raised by technology in medicine and experimentation on man, in his *Philosophical Essays: From Ancient Creed to Technological Man* (published in 1974). His promise of a forthcoming book on *Technology and Ethics: An Essay in Moral Philosophy*, if it measures up to his past performances, as it no doubt will, forebodes a culminating statement of lasting value to both philosophy and technology and/or medicine.

The present volume, however, does not purport to give us any idea of what that work will be or do, since it contains nothing written by Jonas himself. It gives us only a complete bibliography of his works, which, in addition to 11 books ranging from early Gnosticism to modern Technology, include some 62 items also covering the same subjects, as might be expected. This bibliography represents a value in itself. Most of the book consists of some 16 original papers written expressly for this volume by authors who have been influenced by Jonas either as students or colleagues, and who pursue, on their own, themes that are dear to him as well as in keeping with the series on *Philosophy and Medicine*.

The contributions are grouped under three headings: Section I—Humanity, History and Medicine; Section II—Philosophy of Organism; Section III—Science, Infirmary and Metaphysics. But these headings hardly represent what is in the papers. Nor does the introduction by Engelhardt, co-editor for the series, succeed in pulling the papers together or giving them an adequate conceptual unity. The best that can be said, in partial agreement with Engelhardt, is that many of them do treat basic philosophical questions that underlie medical ethics and bioethics, though one would hesitate to throw terms like "ontology" and "metaphysics" around as loosely as is done in the beginning and even in the title of the book. Philosophy of organism, philosophy of biology, or philosophy of medicine, and even phenomenology, hardly cover what is ordinarily understood by these terms, though they do border on it in some respects. Moreover, what should not be overlooked is that the volume also contains several very good papers pertaining to medical ethics by Cassell (on the conflict between the desire to know and the need to care for the patient), and by Currie (on the redefinition of death).

The book leaves one with an impression of scattered interests, all relating loosely, but in different ways, to the philosophy of medicine. There are papers on basic anthropology or human life science relevant either to modern technological man or to the current situation of medical care in its individual or institutional dimensions. There are papers on Darwinism, Aristotelianism, Whiteheadianism, Cartesianism, and Hegelianism. These represent some interesting research and reflection on some basic issues concerning the nature of life, but the precise connection

with medicine in each case is left more or less up to the reader. Marjorie Grene, for example, speaks of reflecting "in a rather rambling fashion" about some Aristotelian claims concerning the nature of life and, in the process, spends a lot of time discussing Hume and Kant along with other more modern views. She eventually focuses on some aspects of Aristotle's teleological approach to nature and life and clarifies a somewhat garbled view of teleology attributed to Aristotle earlier by Leon Cass but which smacks more of Platonic formalism than of Aristotelian life science (compare pp. 117 and 127). Grene, however, is not the only one to ramble. Other authors in the book do so also, perhaps more than she does.

To select certain pieces for special comment from a book like this is, of course, a function of one's own peculiar interest. This reader would single out Kennington's contribution on "Descartes and the Mastery of Nature", a theme that has been getting more and more attention in recent Descartes scholarship, as important for understanding the framework out of which the modern technological mind comes, and Murray Greene's on "Life, Disease, and Death: A Metaphysical Viewpoint", as a good example of what a metaphysician like Hegel can do with the process of life. Richard Lauer's "Ontology and the Body: A Reflection", raises an interesting point against Jonas' way of focusing on metabolism for his philosophy of life. One could argue that the barb of dualism which he levels at Jonas is, in fact, no more than a projection of his own latent phenomenological dualism which he projects onto Jonas' philosophical biology. One of the significant contributions of Jonas to the philosophy of life is to have sought in life itself the criteria of judgment about life. This, I think, is of special importance in any context of medical ethics, and phenomenology does not appear to be in a position to detract from it as long as it continues finding only Cartesian dualism in any attempt to distinguish form and matter within the unity of living beings. Granted, as Mohanty argues in his piece on "Intentionality and the Mind/Body Problem", a phenomenology of the body may yield better results than the best contemporary analytic discussions of the mind/body problem; but there is more to the philosophy of life than just phenomenology and linguistic analysis. Besides Jonas, one can refer to Aristotle and Hegel, to mention two of the more important instances discussed in this book.

Finally, it should be said that the scattered effect of this book is perhaps only a reflection of the general state of the field of the philosophy of medicine as it begins to examine some of the more fundamental questions underlying medical ethics or bioethics.

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**The National Health Service: The First Phase 1948-1974 and After**, by BRIAN WATKIN, Allen & Unwin, London, 1978. 170 pp. \$18.75 (hb), \$8.75 (sb)

Only those of us aged fifty or more are likely to remember the bitter conflicts and arguments which preceded the introduction of the National Health Service. There was of course much conflict and dispute but also a sense of vigour and excitement. British society was entering the sphere of welfare experiments and the N.H.S. was an essential component of the State's growing involvement in and

acceptance of responsibility for the well-being of the nation. Watkin's opening chapter "A National Health Service—A New Beginning" catches some of the atmosphere of excitement which characterised the debate over the introduction and subsequent structure of the N.H.S.

What the chapter does not do is to examine, in any depth, Bevan's genius for manipulating the various interest groups within the profession. To do so would demand the utilisation of some theoretical approach to help explain the circumstances and conditions which influenced the way in which the N.H.S. was structured and implemented. What were the factors and conditions which culminated in the tri-partite structure? Why were hospital physicians so successful in the negotiations with (or protests to) Bevan? Why were the proposals from public health practitioners for a much more closely integrated and coordinated service totally ignored? In my opinion such questions can only be answered through the application of some theoretical framework by which the data concerning disputes and arguments about the detailed structure of the N.H.S. can be organised and subsequently assessed in terms of the theory's ability to suggest plausible explanations for these events. This Watkin's book does not do.

The bulk of the book contains a detailed catalogue of the subsequent working of the N.H.S. covering very familiar ground to those who have read the earlier works of Lindsay, Stevens, Forsyth, Willcocks and Brown. Nevertheless new and interesting material is incorporated in the chapters dealing with the background to, and introduction of the 1974 reforms. Chapters 7, 8, and 9, respectively entitled: Who Manages the Health Service? The Health Service and Social Change, and Reorganisation—Launched on a Sea of Words, outline the growing strength of criticisms of the tri-partite structure. Gradually the focus upon managerialism emerges as Watkin discusses the background to the Green Papers, the White Paper and the subsequent administrative changes. The administrative disease of 'Brunelosis' becomes very evident but Watkin seems to miss the point—that the proposals for increased managerial control were drawn from the world of business whose applicability to the problems of a public service are, to say the least, obscure.

The final chapter is an attempt to evaluate the N.H.S., and Watkins takes a pessimistic view. Taking a simplified version of the McKeown argument, he attempts to show that improvements in the health status of the population owe more to general improvements in the standard of living than to direct medical intervention. While this argument is generally true it ignores the data generated by Baird, Illsley and their colleagues which show that improvements in policies of management of pregnant women made possible by the introduction of a N.H.S. lowered dramatically rates of perinatal mortality in Aberdeen. Such policies introduced in other parts of the U.K. have had a similar affect.

But above all Watkin's pessimism is perhaps the result of a limited sociohistorical perspective as well as a lack of cross-cultural comparisons. (The present reviewer is living in the United States where even relatively common acute and chronic illness conditions may simply decimate one's financial status!) In the 'twenties and 'thirties many British people could not afford to be ill; under the N.H.S. this is no longer a problem. How easy it is to forget the social and moral principle upon which the N.H.S. was established; the eradication of financial barriers between physicians and patients.

**Evaluating Primary Care**, by EWAN M. CLARK and J. A. FORBES. Croom Helm, London, 1979. 235 pp. £10.95

This book describes the reorganization of an academic group practice of general practitioners in the United Kingdom in which medical responsibility was divided according to the age of the patient (age-specific care), a model suggested by Thomas McKeown in 1965. The book is organized into three parts. The first describes the practice, a computer information system and problem-oriented medical record system; the second, process and outcome medical audits to assess the quality of care in the new system; and the third, the experiences of the physicians in a new system and the authors' conclusions. It is an honest treatment of the group's experiment in reorganizing their practice and their attempt to evaluate the impact of their practice. The circumstances are described in a way which will allow some to draw conclusions about the validity of the group's experience; and in the tradition of British general practice research, uses the practice as a "laboratory". However, critical readers will not be satisfied and, in the end, will not know whether the age-specific organization was any better for the patients or their physicians.

The book fails on this score. It is, after all, a descriptive study of a system involving only five physicians, some in the process of learning to be "age-specific" physicians, and patients learning how to behave and to use a new system. The new blurred into the traditional system, with the main difference being the patients were directed to the pediatrician for children up to age 12, the geriatrician for those age 65 or older, or to two "mediatricsians" for those in-between. During off-hours, patients went to whoever was on call. Patients were internally referred by problem rather than their age. Few patients, in fact, even noticed a change to age-specific care when formally surveyed. There is no way to answer the implied question of whether age-specific care is better than traditional group general practice because there is no attempt to provide a comparison group, much less a control group. Whether or not the question is even appropriate may be debated as the organizational structure was obviously in flux, and age-specific care was not clearly specified or practiced by the providers and was inapparent to the patients.

In this pilot setting, health services evaluation should be aimed at providing operational information for administrators and providers to identify areas to make the practice better or to see whether the program accomplished its goals, rather than for generalizing to the nature of primary care practice organization. The description of CLINICS, the computer information system, is detailed and beyond the grasp of most practitioners. Although the data management system served administrative and research purposes, the type of questions asked could have been answered manually as well. The book spends nearly 27 pages on work load and patient demography, a preoccupation of research in primary care, which adds little to available information.

The studies on quality are, as the authors state, "superficial". Nevertheless, the use of the tracer disease, hypertension, suggested deficiencies in the management of the condition. The audit showed that hypertension was poorly attended to and that most patients' blood pressure was not controlled to the levels agreed upon by the practitioners.

The final section, presenting the participants' reactions, is the most engaging. Dissatisfaction stemmed from unequal work loads: the single-handed pediatrician (who also did obstetrics) and the geriatrician had no coverage. The practitioners voiced their insecurities common among young generalists; about being general practitioners in a specialized world, the possibilities for continued intellectual growth and work satisfaction, and whether persons really wanted personalized continuous care.

The book rambles from philosophy to studies with indis-

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criminate presentation of results. The appendix has limited value. Some figures have little purpose or no legends or labels or they give percentages without crude numbers. One table contradicts the conclusions in the adjacent text.

Innovations in the organization and delivery of health services need to be critically examined. The authors should be commended for their attempt at quantifying the gains of their practice and the candor with which they present their findings. But, the reader is distracted by the book's flaws. The authors' recommendations derive less from their data than from their views on how things ought to be.

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**Forgive and Remember: Managing Medical Failure**, by CHARLES L. BOSK. Univ. Chicago Press, Chicago, 1979. 236 pp. \$15.00

This book is a must or an almost-must for anyone concerned with resident training, medical education in general and surgery in particular.

It is refreshing, as one medical colleague has pointed out to me, to find a sociologic study of surgery which does not immediately go on the attack. Indeed, the author has presented at once an objective as well as sympathetic study of surgery, acknowledging that it is, indeed, a "body contact sport". To train a surgeon requires a heretofore undefined, though perceived, system of dealing with inevitable errors and failures on the way to developing skill, judgment and success. For clearly, the visibility of a surgeon's actions means that each death and complication raises the question of error and responsibility in a very direct way.

The author, now assistant professor of sociology at the University of Pennsylvania, spent a year and a half as an interested but, so far as possible, objective observer of surgical residents in a university hospital setting. The model he chose is reasonably representative of a "teaching hospital" residency, the kind of training program which would merit the approval of the Residency Review Committee. Two types of service were chosen; one primarily clinical, the other research-oriented. The relationship between attending staff and resident, superordinate and subordinate, is clearly spelled out and illustrated with specific and detailed examples. His interpretations are ingenious and sound. One might argue that the Spartan organization of the Surgical Service is slightly overdrawn, but the author writes it as he saw it, and the net effect is convincing. He shows clearly that one can deliver a high quality of humane care and train a surgeon at the same time, but that it requires an immense amount of hard work, judgment and dedication.

There is an illuminating chapter on "Error, Rank and Responsibility" in which we are led to define four types of Error: technical, judgmental, normative and quasi-normative. The first two speak for themselves. The term normative is an interesting one. A normative error occurs when a surgeon has in the eyes of others failed to discharge his role obligations conscientiously and, indeed, has violated the norms of accepted behavior. These are the serious errors. In a developing resident, normative error becomes almost a character defect, for example irresponsibility, unwillingness to seek help when clearly indicated, etc. Quasi-normative errors are those actions which do not conform to the standards set by a given superordinate but unless flagrantly repeated, are not of themselves in violation of basic norms of conduct.

There is a delightful discussion of "outcomes". An expected success or an expected failure is easily passed

over. The unexpected success qualifies for Grand Rounds. The unexpected failure comes before a mortality/morbidity conference. Here we are given a superb description of what befalls the subordinate, and how the superordinate can "put on the hair shirt" but it is a hair shirt with a silken lining.

Taken together this is a most readable book. It is well written, its ideas nicely developed with a minimum of sociologic jargon. It should have wide appeal not only to surgeons but to all medical educators and educatees, medical student and resident alike. It should also have broad social appeal and one can only hope that the author will continue his observations of medicine in similar studies for this is an excellent start.

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**Gift of Life**, by ROBERTA G. SIMMONS, SUSAN KLEIN and RICHARD L. SIMMONS. Wiley-Interscience, New York, 1977. 507 pp. \$22.95

Simmons's, Klein's and Simmons' *Gift of Life* is simply one of the finest works on the phenomenon of kidney transplantation yet to be written and researched. Subtitled *The Social and Psychological Impact of Organ Transplantation*, this book brings together a vast array of material on these two aspects of kidney transplantation—both material written by others and material original to the three main authors and the other contributors to *Gift of Life* itself. In fact, the authors' title may be a bit too modest for what their compendium actually accomplishes.

*Gift of Life* is something of a literary hybrid, blending the strong editorial skills of the three main authors with competent articles on a wide range of subjects pertinent to transplantation. In subject matter, *Gift of Life* deals with the transplantation phenomenon from the viewpoints of all parties, persons and institutions: as well as exploring kidney transplantation from the perspective of the recipient, *Gift of Life* looks at sociological and psychological features of the kidney donor, the kidney "non-donor", the medical staff, and the medical professions. In addition, the book provides a bioethical orientation to the impact and possibilities of cultural influence on the society as a whole—and this in a reasoned and unsentimental voice that is welcome (and unusual) when meeting bioethical material. Specific sections of the book treat, consecutively, the rehabilitation and social psychological adjustment of the post-transplant patient, the impact of the donor—or non-donor—search, and issues of health-care delivery as kidney transplantation highlights them. The title's modesty results from its failure to stress three frequently neglected areas that are most admirably delineated in *Gift of Life*.

The first is the matter of the child kidney transplant recipient and donor, whether pediatric or adolescent. There are, as *Gift of Life* illustrates, important differences between the two groups resulting from medical and social differences in these age-ranges. With the aid of Dorothy Bernstein, the authors of *Gift of Life* provide a fully adumbrated portrait of just what kidney transplantation may mean to both the child recipient or donor and to the family unit as a whole. This illustrates a second particular strength of Simmons's, Klein's and Simmons' work and that is its faithful consideration of the familial context in which the transplantation has occurred. This strength is reflected in each of the sections of the book and in each of its component articles. So, too, is the third especial strength of *Gift of Life*: the uniform attention that has been paid to gender roles as they intrude upon, sometimes alleviating, sometimes complicating tragically, the kidney transplant phenomenon.



Again, each of the chapters is thorough in its exploration of possible male/female differences for both donor and recipient and imaginative in its application of what is known about gender stereotypes that help to explain the differences uncovered. This is done in no hard-line feminist or anti-feminist manner, but simply with solid sociological solicitude. Cases where stereotypical female behavior aided the female transplant patient (as where her typically self-sacrificing role made donorship less anxiety-provoking than for the male) are presented alongside cases of stereotypical female behavior working against a woman (as where an adolescent transplant recipient, aghast at her Cushingoid appearance, discontinued her medication to regain her looks and died as a result).

Throughout *Gift of Life*, the authors use experimental information coupled with interview excerpts. The result is a cogent sociological and psychological portrait of the transplant recipient and donor and of the profession and society in which the transplant takes place. For the sociological reader with limited medical background, the authors' concern to explain fully each medical term and medical event will be agreeable, as must their similar concern to explain the limits and strengths of their sociological methodology be agreeable to the medical reader. The occasional recommendations for further testing and for practical application will likewise be welcome to both groups. The skillful editorial work of the three main authors results in a book that is careful to summarize previous work, comments upon that work's failings and successes, and ties it into what *Gift of Life* itself has achieved. The only possible criticism of the volume is one that reflects upon its publishers and not upon its authors. This is the unconscionable number of printer's errors that remain in the final book ("Peter Brent Brigham Hospital" is apparently a favorite), marring an otherwise fine social psychological and medical treatise.

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**Sociology of Medicine** (2nd edn), by RODNEY M. COE.  
McGraw-Hill, New York, 1978. 437 pp. \$16.50

Perhaps as recently as ten years ago, those who taught medical sociology had few texts available for use in undergraduate classes. Recently, however, their textbook problem has undergone a metamorphosis. Now, these teachers face a veritable surfeit of textbooks, whose quality ranges from good to indifferent. *Sociology of Medicine* by Rodney M. Coe, in its second edition, falls somewhere in the

middle. While it gives adequate coverage to the usual bases, it fails to impart a sense of the excitement in the field.

In the preface to this second edition, Coe tells us that his object is to extend his original text to cover "(r)apid changes in the fields of sociology and medicine in the past decade" (p. vii). He includes new materials on health-maintenance organizations, stress and illness, epidemiological patterns of smoking, national health insurance, and the like, which add about fifty pages to the original "analysis of the field of medicine and medical care from a sociological perspective" (*ibid.*). If these topics can be grouped as satellites of institutionalized medicine, then absent from the changes Coe includes are topics showing disaffection with it. As examples, missing are self-care, midwives, hospices, the natural food movement, home birth, women's self-help clinics, and informed consent. Their absence illustrates a more general problem: while his analysis is clearly sociological, Coe is carefully uncritical of the institution of medicine. His treatment of it thus seems myopic, especially in light of the critical views implicit in the recent developments he chooses to ignore.

This uncritical posture seems apparent in the organization of the book too. Major divisions are: Disease and the Sick Person, Health Practices and Practitioners; Health Institutions: The Hospital, and The Cost and Organization. While there are some very nice sections in these divisions (e.g. the straightforward treatment of social epidemiology), I want to draw attention to the sort of analytical point lost by the book's organization. In the second major division are separate chapters on medical history, the professionalization of medicine, and rival practitioners and paraprofessionals. By separating these, the political dimension of medicine as a division of labor created and maintained in specific historical contexts goes unnoticed. Instead, what emerges is an uninspected corroboration of the medical institution's definition of the situation.

All of this is not to say that *Sociology of Medicine* is a bad book. It isn't. As a secondary source, it contains good work. Its footnotes are exemplary and would serve as a good guide for anyone wanting to know the core of medical sociology. But if there is any contrast between 1970 and 1978 in terms of contemporary issues in medicine for sociologists to ponder, it lies in the abundance of current ways to ask the question: Who is to say who is going to do what to whom in which way, and in which place? And that Coe's text does not help us to understand.

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## PUBLICATIONS RECEIVED

- Albrecht Gary L. and Higgins Paul C. (Eds). *Health, Illness and Medicine: A Reader in Medical Sociology*. Rand McNally, Chicago, 1979. 504 pp. \$12.50
- Beuf Ann Hill. *Biting off the Bracelet: A Study of Children in Hospitals*. University of Pennsylvania, 1979. 164 pp. \$9.95
- Blanpain Jan with Delesie Luc and Nyu Herman. *National Health Insurance and Insurance and Health Resources: The European Experience*. Harvard University, Cambridge, Ma., 1978. 294 pp. No price given
- Brandsma Jeffrey M. with Maultsby Maxie Jr and Welsh Richard J. *Outpatient Treatment of Alcoholism: A Review and Comparative Study*. University Park Press, Baltimore, MD, 1980. 213 pp. \$16.95
- Davis Karen and Schoen Cathy. *Health and the War on Poverty: A Ten-Year Appraisal*. The Brookings Institution, Washington, D.C., 1978. 230 pp. \$11.95 (paper) \$4.95
- Diamond Marian Cleaves and Korenbrot Carol Cleaves (Eds). *Hormonal Contraceptives, Estrogens and Human Welfare*. Academic, N.Y., 1978. 146 pp. \$12.50, £8.10
- Gans Herbert J. et al. (Eds). *On the Making of Americans: Essays in Honor of David Riesman*. University of Pennsylvania, 1979. 350 pp. \$25.00
- Gelfand Donald E. and Kutzik Alfred J. (Eds). *Ethnicity and Aging: Theory, Research, and Policy*, Vol. 5, Springer, N.Y., 1979. 372 pp. \$17.95
- Hirschhorn Norbert, Lamstein Joel, Klein Susan, McCormack Jeanne and Goldbert Ronald. *Quality by Objectives, A Practical Method for Quality Care Assessment and Assurance for Ambulatory Health Centres*. Hall, Boston, 1978. \$12.95
- Ineichen Bernard. *Mental Illness: The Social Structure of Modern Britain*. Longman, N.Y. 1979. 112 pp. \$2.95
- Jaco E. Gartley (Ed). *Patients, Physicians and Illness: A Sourcebook in Behavioural Science and Health*. Free Press, N.Y., 1979. 479 pp. \$15.95
- Kessler Seymour (Ed). *Genetic Counseling: Psychological Dimensions*. Academic, N.Y. 1979. 248 pp. \$18.00
- Mandelbaum Maurice. *The Anatomy of Historical Knowledge*. Johns Hopkins, Baltimore, MD, 1979. 230 pp. \$2.95
- Petersen David M., Whittington Frank J. and Payne Barbara P. *Drugs and the Elderly: Social and Pharmacological Issues*. Thomas, Springfield, IL 1979. 255 pp. \$26.25
- Reverby Susan and Rosner David (Eds). *Health Care in America: Essays in Social History*. Temple University, PA, 1979. 288 pp. \$15.00 (paper) \$6.95
- Rogers William and Barnard David (Eds). *Nourishing the Humanistic in Medicine*. University of Pittsburgh, PA, 1979. 338 pp. \$10.95
- Standard David E. (Ed.), with introduction by Stannard David E. *Death in America*. University of Pennsylvania, PA, 1975. 158 pp. \$12.95 (paper) \$4.95
- Townsend Peter. *Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living*. Penguin Books, Hammonds worth, 1979. 1216 pp. £15.00 (paper) 47.95
- Vogel Morris J. and Rosenberg Charles E. (Eds). *The Therapeutic Revolution: Essays in the Social History of American Medicine*. University of Pennsylvania, PA, 1979. 270 pp. \$18.50
- Wehman Paul and McLaughlin Phillip J. *Vocational Curriculum for Developmentally Disabled Persons*. University Park, Baltimore, MD, 1979. 229 pp. \$12.95

## INFORMATION

### FIRST INTERNATIONAL CONGRESS ON INNOVATION OF CARE-DELIVERY FOR HEALTH

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## MEDICAL PLURALISM IN WORLD PERSPECTIVE [1]

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**Abstract**—Starting from the observation of local medical systems, anthropologists cultivate an even-handed view of medical pluralism, in contrast to the normative view that characterizes health professionals. From this perspective, the division of labor between different kinds of practice appears as a continuously negotiated compromise structure and cosmopolitan medical practices are seen to adapt to local cultures. Also, when the Chinese system is described as a comprehensive normative system, one suspects that its pluralistic structure has been neglected and that planners who want to encourage the utilization of traditional medicine in developing countries should learn more about the on-going nature of medical pluralism.

Local medical systems are the units of observation for anthropological field research. Because they are embedded in local communities they vary from one part of the world to another according to the family structures, religious, economic and political institutions of the regional and national societies in which they are located. Our first analytical task is to realize that the concept of a medical system, which appears simple and straight-forward, is in fact loaded with historical assumptions. The concept is an artifact of the division of labor in nation states with Departments and Ministries of Health, and of legislators, physicians and other specialists who claim the legal responsibility for supervising the health status of populations. The generic conception of a medical system is thus based on a single, historically recent system: a bureaucratically ordered set of schools, hospitals, clinics, professional associations, companies and regulatory agencies that train practitioners and maintain facilities to conduct biomedical research, to prevent or cure illness and to care for or rehabilitate the chronically ill. From this perspective other forms of health care are outside the medical system and they are usually ignored. When they are not ignored they are derogated as curiosities, or as fringe medicine, quackery and superstition.

The triumph of modern medicine has been to improve care by applying scientific research and new forms of professional organization to biomedical problems. Since the last quarter of the 19th century this has led to effective knowledge for controlling and curing infectious diseases, and to the complex technology that characterizes the modern hospital. Efforts to increase the scope and to improve the quality of health care have sought to eliminate or severely restrict "irregular practices", so that ideally local medical systems will simply become extensions of a nationally and internationally standardized medical system.

This ideal is expressed in plans that calculate desirable ratios of trained personnel and facilities for different units of the population and diagram their organization in progressively larger and technically more sophisticated units, from neighborhood clinics to regional hospitals and research institutes. Whether these diagrams describe health plans for the People's Republic of China, for India or the United States, they all share the goal of making local medical systems standardized components of a larger structure

that is ultimately linked to a world wide system of cosmopolitan medicine. This goal is a powerful force in modern history because it expresses the dream of a future good society in which modern science will be used benevolently and rationally to relieve human suffering and distress.

No real medical systems realize this dream. In the most advanced industrial nations the quality of medical care is variable, and access to it differs among rural and urban populations, members of different social strata and ethnic groups. The cost of eliminating these variations by fully utilizing scientific knowledge to meet all needs is greater than the wealthiest industrial society is willing to pay. In all societies, therefore, compromises are necessarily made in allocating medical resources.

In recent years reformers have drawn heavily on the example of the People's Republic of China, where traditional Chinese medicine has been incorporated in the state sanctioned medical system. The idea is to consider "irregular medicine" in a more objective sociological manner. All medical systems can then be conceived of as pluralistic structures in which cosmopolitan medicine is one component in competitive and complimentary relationships to numerous "alternative therapies". This way of conceiving the medical system opens the door to serious practical studies on how these therapies and their practitioners provide resources for health care planning. The argument is especially strong for developing countries where local medical systems are largely composed of indigenous practices and the immolation of costly institutional planning from industrial countries is culturally and economically inappropriate [2].

The contrast between these forms of medical sociology is simple, yet health professionals often display a trained incapacity to grasp its implications. Having explicitly studied medical science and technology, it is difficult for them to realize that along the way they implicitly acquired an ideological view to medical sociology. They do not question the objectivity of this perspective because they learned it as tacit knowledge in a context that demanded the mastery of biomedical theories and facts. Their objective skills are powerful means to achieve unquestionably virtuous ends of saving lives, minimizing suffering, and realizing a successful career. Their faith in a system in which local health practices will be standardized by assimilation



to a transcultural medical science is sustained by the rightness of these means and the virtue of these ends. From this perspective the practical problems of medical sociology are:

- (1) to train workers for different levels of competency so that a hierarchy of skills will correspond with a hierarchy of rewards and responsibility;
- (2) to persuade physicians who are the apex of the system to work outside of urban centers;
- (3) to make expensive care less expensive and more accessible to all classes of people;
- (4) to allocate resources between preventive and curative measures;
- (5) to persuade laymen to utilize and to comply with professional care.

*These problems are felt to be interim problems in progress toward an inclusive well-regulated medical system, but the faith that sustains efforts to solve them may be misleading. What appears to be practical may be impractical.*

The normative bureaucratic perspective involves an enormous simplification of the ways that medical systems are organized, and thus encourages self-deception. For example, the willingness of health professionals who visited the People's Republic of China to believe claims of miraculous successes was self-deceptive when the system was described as a perfect bureaucracy that worked without conflict or ambiguity from the level of the barefoot doctor in the rural commune on up to that of the surgeon in a large urban hospital. The description neglected the ambivalence of negotiations between practitioners, families and patients who often have different ideas about how to cope with health problems, it assumed that laymen readily comply with the recommendations of practitioners, and it ignored the spirit-mediums, diviners, priests and other specialists who probably still perform many health care functions in Chinese culture, although they are excluded from the state system. Anyone who was familiar with the ethnographic studies of medical practices in Chinese communities would have asked how these "alternative therapies" and their practitioners were related to the state sanctioned medical system in the People's Republic. To have learned how that system really worked the pluralistic structure of local practices would have had to be studied in an objective manner.

Since the successes claimed for the People's Republic of China were attributed to a system that integrated traditional medicine, planners began to ask how other countries could utilize such medical resources. However, the perspectives of traditional practitioners may be slighted by the way the question is asked and answered. A common proposal, for example, is to conduct modern scientific research on indigenous medicines. Chemists and biologists perform this kind of work, isolating the medications from the context in which practitioners understand and use them.

For anthropologists the interesting proposals are those to train and use practitioners who are normally excluded from the state sanctioned medical system. Proposals have long been made to train midwives and to give them a place in the referral system of pro-

fessional medicine, but on the whole professional health workers have been hostile to them, and in industrial countries they have been almost completely displaced by physicians and "qualified midwives". In developing countries, however, traditional midwives still play significant roles in local communities, and although the prospect of replacing them is remote, health professionals criticize them endlessly with stories to prove their ignorance, superstition, unsanitary habits and uneducatability.

Thorne and Montague show that traditional midwives in Islamic communities have numerous roles other than that of birth attendant—they do household chores for the mother in the period following birth, they are consulted at other times about health matters, they wash the corpse for funerals and they serve in the transition rites for women. Similarly, in other cultures the midwife is a member of the local community in which she practices and her role is woven into the fabric of that society. Detailed ethnographic descriptions of the number, training, character, roles and practices of midwives are needed so that planners will have a base of contextual research to provide data for policy decisions. Thorne and Montague conclude that the limited evidence from Islamic communities indicates "we should be pessimistic about the possibilities of integration or association of traditional midwives in any major way with modern health sectors... no matter what the useful outcome might be in terms of public health... there is massive reluctance on the part of both trained medical personnel and traditional midwives to open a dialogue" [3]. On the contrary, if the laws that made their practice illegal were repealed and they were treated with respect by health professionals, the reluctance of those traditional midwives to learn from and to cooperate with the professionals would probably melt away. Among anthropologists, Brigitte Jordan's work richly documents the skill and responsibility of Maya Indian midwives [4].

In marked contrast to research on folk practitioners by health professionals, anthropologists report that they are often intelligent and curious people who learn what they can about modern medicine. All researchers agree that they are eager to use modern drugs and this in itself is a major problem since powerful industrially manufactured drugs are commercially available to them in many countries.

Throughout the world health professionals interpret proposals to use practitioners of "alternative therapies" as recommendations to legitimize quackery. In China the cosmopolitan medical profession was politically disciplined with slogans such as "Red versus expert". The medical schools were closed and self-criticism sessions were held in which physicians trained in modern science were taught to see their error in rejecting theories and practices of ancient Chinese medicine.

In the absence of revolutionary measures that quash the issue, the concern of health professionals about quackery can be treated as an analytic and empirical sociological problem. A survey of the literature will show that anthropologists who have studied practitioners in local medical systems have reported few charlatans among them. The reason this may be is that traditional curers are often avocational prac-

tioners with other sources of status and income, and their practice is conducted in a public manner among people familiar with the fundamental ideas and procedures that it involves. While secret medications, charms and rites often play a role in therapy, they are usually forms of mystification to enhance a common faith that supports positive responses to treatment.

A recent study in South India describes a physician with an MBBS degree who had adapted his practice to the conventions of the rural area where he grew up. He treated numerous patients by proxy and since he was expected to give injections, he frequently used distilled water. By the standards of his college training he disparagingly described the clinics of rural physicians as "90% quackery and 10% medicine" [5]. Another study refers to "the myth of scientific medicine" to describe the exigencies of cosmopolitan medical practice in urban as well as rural India, and particularly in primary health centers where a physician must deal with hundreds of patients every day [6].

When considering the issue of quackery raised by health professionals it is useful to distinguish between disease as a biological reality and illness as an experience and social role [7]. People have diseases without being ill or assuming sick roles and they experience illness and take sick roles when they do not have diseases. Although the biological and social realities are interdependent they are not isomorphic, and their relationship is culturally constructed. Scientific medicine is composed of rules, categories and metaphors that are particularly effective for discovering and treating diseases, but even if unlimited funds were available to create the best system of scientific medicine planners could design, laymen would probably continue to resort to "alternative therapies" because a central clinical fact of the way medical systems work is that they are social systems that give meaning and form to the experience of illness.

The experience of illness, not the biological reality of disease, causes people to consult others about their health. Generated in these acts of consultation, medical systems inextricably mix other social functions with efforts to prevent or cure illness. Because the exemplars of cosmopolitan medicine make disease the central domain of their competence, they shun the symbolic, political and economic functions of clinical transactions. However, most private practitioners use symbolic clinical forms suited to the culture of patients and their families. The proportion may not be the 90% quackery and 10% medicine of the young Indian doctor, but cosmopolitan medicine is almost always less scientific than it appears.

Health professionals know these things, but they are not always fully aware of them, and the suggestion to utilize rather than to suppress "unqualified practitioners" appears to them to be a Pandora's box. The rule is, *Other people's quackery appears worse than one's own*. Understandably, they do not want to confront the perplexing problem of how to evaluate such practices in their social context. The South Indian study described eighteen varieties of practitioners and the complex set of traditions that they use to interpret, prevent and cure illnesses. Two kinds of registered practitioner used allopathic medicines, but one was self-instructed, while the other had a course of training in homeopathy. They practiced in an area

where villagers had limited access to the government health service or to college trained doctors in private practice.

In such contexts, practitioners like Balakrishna and Krishna Bhat have played a crucial role in initially introducing villagers to modern ideas, medicines, techniques and the framework of modern therapy. Moreover, they have won villager's confidence by functioning within the culture, paying credence to the moral and social aspects of disease and . . . the symbolic aspect of medicine. It is not unusual to see Balakrishna placing his stethoscope on a patient's paining leg. This is not because he does not know the proper use of the instrument, nor is it as ludicrous as it may first appear. Patients are impressed by the instrument and Balakrishna uses it symbolically . . . the action affirms the patient's worth, emphasizes the importance of the condition and assures the patient that the specialist is using all of his available resources to promote a cure [8].

This is not charlatanry, but a kind of "quackery" that is nevertheless useful to the community. The community would benefit from a program that provided such practitioners training and opportunities to improve their practice.

A division of labor exists in every medical system between practitioners who represent different traditions. Thus, in the United States clinical psychologists, yoga teachers, health food experts and Christian Science healers follow various systems of therapy. Cosmopolitan medicine does not meet the demand for health care in the United States, despite its elaborate structure of specializations, extensive facilities and clear professional dominance. For some illnesses and kinds of patients it provides less effective care than one or another "alternative therapy". This is most obvious in psychotherapy. Alan Harwood's research on spiritism in New York City calls it "a Puerto Rican community mental health resource", and describes spiritist centers as places where people learn from each other to cope with health problems, including how to use the system of medical welfare. In psychotherapy, however, spiritism provides the treatment of choice for Puerto Rican believers. The interaction between the healer and sufferer occurs within a framework of common understandings so that patients can judge the talent of practitioners and choose between them. Also, research demonstrates that spiritism differs from the psychiatry available to these people in that it "is consonant with certain basic premises of the culture, does not stigmatize the sufferer and deals with clients' problems by direct counseling and by symbolic reeducation" [9].

In the United States this division of labor appears to be a compromise structure related primarily to cultural enclaves (American Indians, Puerto Ricans, Mexican-Americans), small religious groups and behavioral disorders (Alcoholics Anonymous, encounter groups). While "alternative therapies" interest anthropologists, few planners fully realize their role in the overall system. Comparative research that includes developing countries where large numbers of people depend almost entirely on the "alternative therapies" should provide sensitivity training for planners and social scientists to realize that medical pluralism is not a phenomenon of social enclaves in our own society but a structural characteristic of the whole system.

The concern of workers trained in cosmopolitan medicine with professional dominance has led them to study pluralism in developing countries through surveys in which peasants and other people who are not accustomed to being interviewed are questioned about their conceptions of disease and their preferences in consulting different kinds of therapists. These surveys are misleading because they assume modes of thought that are alien to members of these societies. For example, they assume that people everywhere use the perspective of cosmopolitan medicine in which specific illnesses have specific causes and therapies. In fact, people in these societies think about illness in humoral and punitive terms, and have little or no clinical conception of signs and symptoms. Or the questionnaires assume the universality of individualistic decision-making and of dyadic doctor-patient interactions, which are normative for the clinical practice of cosmopolitan medicine in industrial countries, but not for other societies and forms of practice. These surveys thus provide unreliable descriptions of beliefs and practices in developing countries. However, they do record the fact that everywhere in the world people admire and desire access to cosmopolitan medicine. Most people have a practical rather than ideological concern for therapy, and see nothing inconsistent in using modern and traditional medications together, or in combining chemotherapy with rituals to alleviate sorcery. In a suburb of Lusaka, for example, Frankenberg and Leeseon interviewed 1123 patients of traditional healers (*ng'angas*), and found that two-thirds of them had first resorted to cosmopolitan medicine. However, this community of 80,000 people had 30 or more traditional healers and doctors in private practice, one government clinic and sub-clinic [10].

The structural reasons laymen have such high regard for cosmopolitan medicine are that its practitioners:

- (1) have the superior status of people with formal educations;
- (2) in poor countries they have the power to own or use automobiles, typewriters and telephones;
- (3) their claims to authority are sanctioned by law and government officials;
- (4) their surgery and chemotherapy have impressive "demonstration effects";
- (5) their buildings and medical instruments are impressive. Yet laymen also consult practitioners of the "alternative therapies". They are often socially and physically more accessible to them; they understand and deal with the patient's and family's experience of illness in a comprehensible manner; their therapeutic interventions also have "demonstration effects"; and many of them possess symbols of power like stethoscopes, motorbikes and wristwatches. In India there are government colleges, hospitals, research institutes, pharmacies and clinics for the traditional medical systems, along with similar institutions in the private sector. Other countries do not approximate this degree of professionalization, but in many Asian, African and Latin American countries associations of traditional practitioners exist; training and practice are organized in clinics and cult centers; and companies manufacture and advertise indigenous medicines.

## CONCLUSIONS

1. The regular health professions are the major source of resistance to the rational utilization of "alternative therapies" for planning in both industrial and developing countries. Programs to change recruitment and training in modern medicine would improve the functional relation between different forms of medical practice and would have the greatest effect on the welfare of people in countries where the alternative systems provide a large proportion of health care.

2. The practitioners of traditional medicine and the unqualified practitioners of modern medicine in developing countries are probably no more frequently charlatans than members of any other occupation and the amount of "quackery" they practice is only different in degree from that of trained health professionals who adapt their practice to the culture of their patients. Programs to train these practitioners would benefit their patients and would not detract from the status of more highly qualified practitioners.

3. Fundamental comparative research on the pluralistic structures of medical systems would be an instrument of planning and also a technique for training personnel to design such programs in a realistic manner. The essays in this issue of *Social Science and Medicine* contribute toward this end, as does much other current research in medical anthropology.

## REFERENCES

1. A short version of this paper was delivered at the *Post-Plenary Session on Medical Anthropology of the Xth International Congress of Anthropological and Ethnological Sciences*, University of Poona, India, December, 1978. The paper was originally prepared for the Task Force for "Ecological, Socioeconomic and Cultural Factors in Health" of the Committee on International Health and Foreign Assistance, Institute of Medicine, National Academy of Sciences.
  2. Special Issues of this journal have recently been devoted to research on medical pluralism: *Theoretical Foundations for the Comparative Study of Medical Systems* (Edited by Leslie C.). *Soc. Sci. Med.* **12B**, 2, Special Issue 1978; *Parallel Medical Systems* (Edited by Rubel A.). *Soc. Sci. Med.* **13B**, 3, Special Issue, 1979; *The Transcultural Perspective in Health and Illness* (Edited by Weidman H.). *Soc. Sci. Med.* **13B**, 2, Special Issue, 1979. *The Social History of Disease and Medicine in Africa* (Edited by Janzen J. and Feierman S.). *Soc. Sci. Med.* **13B**, 4, Special Issue, 1979.
- New anthropological books that elaborate concepts for analysing pluralistic systems are John Janzen, *The Quest for Therapy in Lower Zaire*. University of California, 1978; Arthur Kleinman, *Patients and Healers in the Context of Culture*. University of California, 1980; Charles Leslie, editor, *Asian Medical Systems*. University of California, 1976.
- The literature on China is quite large. See: A Bibliography of Chinese Sources on Medicine and Public Health in the People's Republic of China: 1960-1970. U.S. Department of Health, Education and Welfare, DHEW Pub. No. (NIH) 73-439, 1973. Among the experts on the historical sociology of Chinese medicine, Paul Unschuld has emphasized the pluralistic structure of tradition. See: Unschuld P. *Medical Ethics in Imperial China: A Study in Historical Anthropology*. University of California, 1979. Also, Unschuld P.

- Medico-cultural conflicts in Asian settings: an explanatory theory. *Soc. Sci. Med.* **9**, 303, 1975. A comparative study of Chinese communities and other Asian societies is: Kleinman A., Kunstadter P., Alexander E. R. and Gale J. L. (Eds), *Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies*. U.S. Department of Health, Education, and Welfare, DHEW Pub. No. (NIH) 75-653, 1975.
3. Thorne M. and Montague J. Role and function of the traditional midwife in Islamic societies. Draft paper presented at the Kaplan Lectures colloquium on Biology, Society and History in Islam, University of Pennsylvania, 1977.
  4. Jordan B. *Birth in Four Cultures*. Eden Press, Quebec, 1978.
  5. Nichter M. *Health Ideologies and Medical Cultures in the South Kanara Areca-Nut Belt*. University of Edinburgh Ph.D. dissertation in Social Anthropology, 1977.
  6. Takulia Harbans, Parker Robert and Srinivas Murthy A. K. Orienting physicians to working with rural medical practitioners. *Soc. Sci. Med.* **11**, 254, 1977.
  7. Eisenberg Leon. Disease and illness; distinctions between professional and popular ideas of sickness. *Cult. Med. Psychiat.* **1**, 1, 1977. Horacio Fabrega, Arthur Kleinman and other anthropologists have used and commented on the utility of this distinction, so that it has now become common usage in medical anthropology.
  8. Mark Nichter, *op. cit.*, p. 390.
  9. Harwood Alan. *Rx: Spiritist As Needed: A Study of a Puerto Rican Community Mental Health Resource*. Wiley, New York, 1977.
  10. Frankenberg Ronald and Leeson Joyce. Health in an urban African environment. *Afr. Envir.* **1**, 14, 1975. Also, by the same authors: Disease, illness and sickness: social Aspects of the choice of healer in a Lusaka suburb. In *Social Anthropology and Medicine* (Edited by Loudon J. B.). Academic Press, 1976.



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## MEDICAL ANTHROPOLOGY AND DEVELOPMENT: A THEORETICAL PERSPECTIVE

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**Abstract**—It is argued that social and cultural anthropologists concerned with health systems need to insert their analyses into the wider perspective of three processes—development, the making social of disease, and their view of anthropology itself. Development can usefully be seen as the complex, often contradictory, process whereby capitalism as a mode of production comes to dominate over precapitalist forms. At the same time these very forms remain an influence over health behavior even in the most developed societies. Such an approach to development also involves attention to commoditisation and the existence of not immediately apparent class interests in, for example, both Western and traditional medical rhetoric, high technology medicine and pharmaceuticals. The making social of disease is facilitated by conceptualizing ailments in three phases, crudely biological disease, psychological illness and social sickness. The current disease/illness dichotomy is criticized as lending itself to a characteristically ideological, individualistic or at best dyadic approach to sources of ill health. The nature of ritualization or ceremonialization in capitalist and precapitalist society is explored with the help of brief reference to the author's own field work in Lusaka and to studies of Amhara in Ethiopia, a village in Tamil Nadu, South India and of doctor-patient interaction in Swansea. Following and developing Young's ideas, sickness episodes are characterized as dramatic "games" which create, recreate and confirm social ideologies in all their contradictoriness. A critique of the Tamil Nadu study reveals the potential for social change implicit in plural South India. Material from Swansea is used to suggest the differences between the concentrated drama in space and time characteristic of precapitalist ritual and the diffuse nature of both ceremonial and ideology in a developed capitalist society while once again pointing to the potential for social change revealed within apparently conservative functionalist analysis.

Finally, social anthropological analysis is presented as the analysis of custom in local social process and it is argued that this process in turn needs to be seen in a wider context which will help anthropologists to bring together the concerns of political economy, sociology and anthropology and to facilitate social change rather than, or as well as, individual adaptation.

### INTRODUCTION

It is sometimes argued that the post-colonial period offers special opportunity to anthropologists in the field of health and medicine. They could contribute to the understanding specifically of the small scale social process by which biological disease becomes an episode of social sickness perhaps by way of consciousness of being ill. This view while in one sense ambitious now seems to me too limiting to the scope of anthropology [1]. In this paper, I argue that the medical anthropologist has to situate his/her work in the context of three processes—development, the making social of disease, and in the more general concepts of anthropological analysis.

### DEVELOPMENT

An over-simple Marxist view, derived from the Communist Manifesto, suggested that the process of development could be seen in the first place as a reliving of the stages passed through by European society and the gradual total destruction of all social relations not determined by the cash nexus. Precapitalist forms of society are, in this view, inexorably smashed and destroyed by the greater economic efficiency of capitalist social formations, as indeed are egalitarian societies in the face of slavery or feudalism. In the last analysis this simple model may not be far from an accurate description of the product—but the

process is more complex and more interesting and the number of pathways to the final goal manifold and various. A number of more or less Marxist writers on economic anthropology have tried to analyze the articulation and interpenetration, even interdevelopment, of more or less advanced modes of production. The economy of health care (traditional or Western), the ideology of beliefs and practices relating to disease and of the concept of disease itself, the politics of healer-patient and patient-patient relations, like other aspects of economy, ideology and politics, are all subject to and the subject of changes in the nature of production relations and the relationship between one set of production relations or mode of production and another. What we call pluralism in medical systems can be seen in these terms and as part of a continuum.

In Lusaka in the late sixties, it was no longer a surprise to anyone to see traditional medicines sold as commodities over the counter in the markets, isolated from both the rituals of the *Nganga* and the cosmology of their (very diverse) tribal origins. Wulf Sachs records the shock of his *Black Hamlet* "witch-doctor" observing the same process in 1936 Johannesburg [2]. In modern India the sale of Ayurvedic remedies packaged with the paraphernalia of the modern pharmaceutical industry causes no pain to the pandit, although it may cause pique to the allopathic physician. The commoditisation of cures into a product, whether what is sold is a simple package of chemicals, or a complex social process is part of a number of

general choices and changes. In Lusaka at the extremes a potential patient chose between impersonal, universalistic ruling-class backed Western Medicine at one end and personal, charismatic popular curing procedures at the other. These apparent extremes however not only overlap but share a secular trend towards the ideological values of dominant capitalist society. Ideally the personal relationships around which medical beliefs and practices are structured in traditional society or indeed initially in Swansea or New York [3, 4] are interpersonal. They are between the incumbents of domestic roles (spouses, parents and children), the known and named cornerstore pharmacists, the wise aunt or uncle, the specified and known Nganga who unlike the others is genuine, and whose genuineness [5, 6] arises and is perceived precisely in contrast to the fakeness of his/her competitors. This, in Lusaka, showed itself in the contradiction revealed in surveys between the universal theoretical contempt for Ngangas as a group and the equally universal practical resort to them as individuals.

Ideally, in contrast, and correctly in the eyes of at least some Western physicians and perhaps especially surgeons, biomedicine requires of its adherents a universalistic recognition of the abilities to control disease of all the members of specific categories who are labelled by name and symbol. Doctors, usually male and in white coats carrying stethoscopes exist at one level; nurses usually female and in uniform represent another. The task of the patient is to learn to read the signs, accept the symptoms and understand the symbols which, correctly read, reveal the limits not only of healing ability but of power and control derived by the individual from his/her category and its permitted level of information. Anthropologists can chart, and have charted, not only the invasion of the spheres of the particularistic first by the universalist second, but also the conversion of the first into the second as part of the process of capitalist domination. Studies in advanced industrial society, however, also reveal the resistance of domestic production systems to total submergence. The patient, outside the hospital, is only barely controlled by the physician. Stimson and Webb in their study of *Going to See the Doctor* in Swansea [4] show how the patient prepares her own ground with domestic and gender allies before entering the doctor's surgery; seeks against all odds to define the situation and control the action within the consulting room; and after leaving, again in a social context, relives, redefines and re-evaluates the advice received, and takes her own decision what to do. Only when physicians transfer the patient's 24 hour life to the environment they control, the hospital, does the characteristic rational-bureaucratic organization of the capitalist mode of production totally dominate. An interesting account of a halfway stage in this process and the category struggles to which it gives rise is in David Boswell's account of *Escorts of Hospital Patients* (in Lusaka) [8].

As I shall argue (following and developing Young's seminal 1976 paper [9]) in the next section, part of the essential process of making social the disease, of transforming it to sickness, is what he calls the exculpation of the patient. I prefer to think of this in the more general terms of legitimation. This too can be

presented as two poles of a continuum, stretching from particularistic to universalistic. The traditional healer points to socially determined if ultimately individualized external reasons for disease—an evilly disposed Mother's Brother or co-wife. The Western physician points to the ultimate in universality—biological causation affecting ego specifically and in a sense alone. In the last resort, he supplies in writing and in precise if sometimes spurious terms (e.g. Pyrexia of unknown origin) the specific cause of death or temporary absence from workaday roles. Traditional healers like all patients *speak* their minds with all the redundancy and lack of control that that implies. Weber's inclusion of *written* files as one of the characteristics of ideal type bureaucracy is important to remember here. Vieda Skultans notes a testing exception when she writes of spiritualists in Swansea. "In fact there is a stigma attached to knowing about spiritualism, especially mediumship and healing, from published material" (p. 196) [10].

Two further aspects of development penetrate from outside the subject matter of the medical anthropologist. First, the existence of actors outside the immediate social situation: like the steel axes which changed the culture of the Siamese [11] before the representatives of the culture which made them followed them into highland New Guinea, so the products of the international pharmaceutical industry go ahead of the physicians who are their chief salesmen in the Western world; anthropologists need to be more alert to this than their sociological colleagues who neglected this aspect of the health industry for so long.

Second, the societies in which medical pluralism flourishes are invariably class divided. Evans-Pritchard [12] and others in their discussion of magical medicine discuss the differential access and control of chiefs and commoners, but in countries like India and Zambia there have emerged at a national level classes with contradictory vested interests often saying one thing and doing another, presenting a familiar contradiction between ideology (as a set of overt and covert beliefs and practices) and rhetoric (an overt statement of beliefs). Thus, in both countries, part of the populist anti-imperialist rhetoric is, if not opposition to Western medicine, at least support for traditional healers and systems of medical thought, but as I have argued elsewhere, this support is literally skin deep [13]. Members of the ruling class whose ailments require deeper penetration look to injections, drugs or surgical intervention from the West. Facing the other way towards WHO and its conceptions of preventive medicine for rural masses, again the rhetoric conflicts with class needs either for personal curative medicine against the diseases of albeit relative, urban affluence, or for the symbols of power and status represented as much by the gleaming chrome of the recurrent finance-absorbing urban white elephant hospital, as by the airport and the processional way which customarily joins it to the capital.

Another aspect of class ideology is the over identification of an influential part of the petty bourgeois elite with the high status attributes of Western science and a characteristic overstatement of the merits of Western technology including medicine. In the metropolitan centers of the West, relatively unthreatened

physicians can claim less while they can usually achieve or appear to achieve more.

#### THE MAKING SOCIAL OF DISEASE

The second process which medical anthropologists are concerned with in the understanding of the relevance of medicine to development is the making social of disease. Here it is necessary if our analyses are to be adequate to suggest three phases which will not always all be present and which will not always manifest themselves as discrete stages—disease, illness and sickness. *Disease* by which I mean a biological or pathological state of the organism whether or not it is socially or culturally recognized, and whether or not the patient and his/her advisers, lay or professional, are aware of its existence. Many so called community surveys in industrial societies have revealed considerable pools of such disease, for example—uncontroversially diabetes and glaucoma; more doubtfully hypertension; most questionably depression. The effect of such surveys is, at one level, to bring such diseases into social consciousness as sickness, without the intervention of the personal consciousness of patients that they themselves are ill. They also raise (as Cochran long ago pointed out) a particular variation of the ethical problem of should the doctor tell. Western curative medicine is predicated on the sequence—being *diseased*, feeling *ill*, involving healers in the legitimization and creation of *sickness* as a social state. Social epidemiology changes the order to sickness → disease, and if the doctor does tell, illness. It is this change of order which causes ethical discomfort to the physician to an even greater extent than the iatrogenic sequence—illness, sickness, disease.

The second category I wish to use is *illness*, by which I mean the patient's consciousness that there is something wrong (about which in disease terms he/she may or may not be technically correct—a lot here of course depends on who is to be the final judge). Brown and his associates in their recent studies of depression see themselves as concerned with the prevalence of a disease [14]. The expression they use is "psychiatrically ill". Leeson and Gray [15] comment of their subjects, "we should prefer to say that they were severely distressed" (p. 164). Paradoxically, perhaps, if the usage proposed here is adopted, the contradiction between Brown and his commentators can be resolved. As Brown *et al.* themselves argue they transfer the problem to the consciousness of psychiatrists—the psychiatrically ill are those who would be accepted for treatment if they presented themselves at a psychiatrist's clinic. More straightforward if more remote were those "patients" in Lusaka who presented themselves at a healer's because of a run of bad luck in love or litigation, or in preventive terms to avoid such an outcome.

The still more straightforward situation, the ideal type model is of the prepatient who notices a sore throat, a runny bowel, or an aching head, decides that he/she is ill and takes culturally and socially appropriate steps which result in the making social of his/her sickness.

Through the pioneering studies of Fabrega [16] and Kleinman, the distinction between disease and

illness is becoming commonplace in American anthropology. The latter writes:

In the language of our model, disease denotes a malfunctioning in or maladaptation of biological and/or psychological processes. Illness on the other hand, signifies the *experience* of disease (or perceived disease) and the societal reaction to disease. Illness is the way the sick person, his family and his social network perceive, label, explain, evaluate and respond to disease [17, p. 88].

Leeson and I [7] in our attempts to understand illness behavior in Lusaka followed earlier (equally American) sociologists in proposing the three phase model I am here reiterating. I think we were correct and that Kleinman's model has highly characteristic inadequacies which mark its cultural and curative bias.

The *individual* patient and his/her family is seen as constructing a reality around the disease event out of the cultural material that comes to hand. The physician in contrast constructs his cultural reality which if there is "genuine" disease is likely to be correct. If he detects no "disease", he collects a fee when appropriate and releases the patient to go elsewhere. The anthropologist imparts his knowledge of the patient's cultural construction to the physician whose ability to impose his own (correct) view of the situation is thereby enhanced. Social reality is easily reduced to dyadic transaction terms in this way. Thus Allan Young [9] imprisoned (if only temporarily) in this model is forced into an equally individualistic view and sees the process of making social as *exculpating* the individual by other individuals in a cultural context. This means that he has to append the genuinely social ontological aspects rather artificially to his argument (see however [34, p. 115]).

If, on the other hand, we restrict illness to the making individual of disease by bringing it into consciousness we can use sickness to apply to the total social process in which disease is inserted. This will force us to include in the same process of social interaction and historical development the totality of healers, lay and professional, and the totality of distressed.

By using the concept of illness, we enable the physician to see how his view differs from the patient—and how he can impose his cure. The concept of sickness enables us all including physicians to see more clearly the significance (in U.S. public medicine) of, for example, the maleness and the whiteness together with the class position of the physician and the femaleness, blackness and subordination of the patient. Neither black woman nor white professional male steps outside society when they step into the consulting room. Indeed, as Young suggests, power relations within it are intensified because it represents the interface of life and death, culture and nature. Their differing perceptions of themselves and their respective situations come neither by chance (nor by science on the one hand and folklore on the other), but by their social experiences themselves, categorically limited if not determined. The experience of their interaction contributes in turn to the structure of society outside. Perhaps the most familiar example to us is the relationship Father/Mother/Child in the "traditional" elementary family and its parallel Doctor/Nurse/Patient in the "traditional" hospital [15,



18–20]. Another example is provided by the neat stratification of Zambian urban society [21, 22] and its reflection and reinforcement in the hospital—a majority of Zambian black women patients and their children were treated by Black Zambian Medical Assistants and Enrolled Nurses, and Coloured (often South African) State Registered Nurses, controlled by White English Sisters and Matrons, Indian doctors, and white consultant physicians and surgeons. The only groups of equal ethnicity and status to the patients were the female relatives who fed them and the orderlies and messengers who, in this situation, provided the basic services in the institution. Leeson and Gray point out the way in which ritual practices reinforce and confirm the role/statuses of the British hospital—the housekeeping of the ward sister and the consultant's ward round in which the patient is distanced both by the nature of the language used and not being addressed directly but only through the nurse. They remind us of the fantasy hospitals of literature in which patients (if they deserve to) nearly always get better and in which the (virtuous) nurses get their man, and thus transfer from a professional to an amateur mothering role.

This ritualization (or more strictly ceremonialization) is an essential part of the making social of sickness in most societies although the nature of ritual seems to me to vary only partially autonomously from the nature of production relations in general.

Social concern is expressed by public ceremonies in many pre-capitalist societies—spirit dancing and cults of affliction as well as public divination [23–25]—and social distance is expressed by the positioning and differential participation of sufferers, healers and significant others. They are all, however, present at one time and in one place. In capitalist society one purchases the symbols of taking to one's bed and regular injections and measurements. Changes in status are marked by changes in transport (stretcher, wheelchair and walking stick), and ultimately by linguistic practices. Sickness through language, literature and "tale" precedes and survives individual disease, illness, personal consultation and legitimation.

In pre-capitalist societies, baths, washings and lustrations are seen as adding to the patient and perhaps his/her ailment; in Capitalist society baths reduce. This is symbolic of a general difference—an episode of sickness is a disturbance of the relationship—biological-cultural-social. Treatment in precapitalist society is to contain by making social. The social mechanisms may emphasize interpersonal, and therefore in the last analysis, containable conflict. In all class divided society, but especially in advanced capitalist society, making conflicts social is too threatening. Sickness is therefore pushed back through psychological illness to biological disease. The social processes paradoxically operate in order to individualize. These points can be demonstrated and illustrated through work in Ethiopia [9], in Tamil Nadu [26, 27] and in Britain [4].

Young argues that among the Amhara, sickness episodes have what he calls ontological importance as dramaturgical contests which reaffirm and legitimate other aspects of the society's value system especially because, (a) sickness is always there and is relatively indiscriminate in the categories it attacks; (b) the

onset of a sickness episode compels people to initiate or participate in it and in turn compels them to reflect on their social order; and finally (c) since etiologies are socially constructed but out of pre-given cultural elements it forces them to recreate and reinforce their culture. He notes the similarity with rituals in general. He might have continued explicitly to point out (following Caillois [28] and even Frankenberg [29, 30]) the similarity between such episodes and sports contests in other societies—a point his language makes implicitly. He writes:

Episodes of acute sickness have many of the characteristics of contests and so they are convenient mechanisms for making the kinds of decisions that I have discussed. They are episodic, their possible outcomes are clear cut, they are played according to highly conventionalized rules and generally their outcome cannot be predicted before the episode is played out.

One could add that they have other characteristics that Caillois attributes to some, if not all, games—there is characteristically an audience, and a sacred space; they involve both kinds of contest, between humans and against natural forces (including mystical ones); and they often involve mimetic, acting out, and vertiginous, trance-like activity (see below).

The process of making social sickness includes the converting of "signs" into symptoms which are "expressed, elicited and perceived in socially acquired ways". The symptoms in turn become polysemic expressive symbols which at once indicate the illness of the individual the "extra-ordinaryness" of the social situation, and the continuity of the culture (Frankenberg's exegesis). Societies other than *Erewhon* [31, 32] have special techniques which exculpate the sick person and transfer social accountability for their behavior to an agency outside the sick person's will [9, p. 16].

A sickness episode begins when the principal and/or his relatives decide the range of symptoms into which his signs *could* be translated. Next they must obtain the services of someone, whose medical powers are appropriate to this range of symptoms; under certain circumstances, they may have power enough themselves to translate the signs. Their choice of diagnostician decides what set of rules will be played, what individuals (including therapists and pathogenic agents) and audiences can be mobilized, and what sorts of social states will be involved. The therapist's task is to communicate and legitimize the episode's outcome, and this, too takes place according to rules shared by sick persons, healers, and audiences.

Here, notwithstanding his earlier emphasis on exculpation (for the individual) as the key organizing concept [9, p. 14–15], Young has correctly, in my view, shifted his emphasis to legitimation (for society at large). This enables him to conclude about the dramaturgical nature of serious/acute sickness episodes:

While praxis takes place in many different settings, action that communicates and confirms abstract sociological and cosmological ideas tends to take place (in traditional and tribal societies, at least) in dramaturgical settings. Because these ideas are communicated through expressive symbols, it is also true that these symbols are used most often in such settings.

The characteristics of sickness episodes already described are played...

...on a field dense with expressive symbols; there is the expectation that events will move toward a climax; the episode is marked by a mood infused by extraordinary emotions rising out of man's profoundest fears; and it is sustained by a clearly articulated dialectic of persons and forces that lends a coherence to the world of events and experiences that is lacking or obscure in humdrum situations.

Young is, of course, right to continue to point out that in the West it is different because of the division of labor and the greater development of power stratification. What he there describes is consistent with the general lived ideology of developed capitalist industrialism.

The active and powerful healer and his passive and object-like client are symbolized in what seems to be a unique combination of ways the physician demands nakedness, recumbency unresisting access to body regions that are called "privates" in everyday life and forbearance of the pain and discomfort which he causes—an assortment of forms that, in the West, is mainly limited to sickness episodes, the rearing of pre-adolescent children, the treatment of "unliberated" women during coitus and the management of the population of "total institutions."

Finally, he points out that the symbolization of sickness in the West also alienates the individual from the operations of his own body. The physician takes blood and looks at X-rays and seeks other signs independent of the patient's consciousness. He reserves the right to himself to decide whether or not to reveal what he thereby finds. One could go further than this, particularly for those physicians whose practice is informed either with one (by no means universal) approach to psychoanalysis or perhaps even by one kind of use of Kleinman's clinical anthropology and say that the Western physician seeks in his contest with patients to alienate from them their very biography; their construction of the meaning of their own situational life project as well as the part of it which brings them to consultation.

The mechanism of this in one medical situation, the consultation with the general practitioner, and the symbolic opposition to it in the "story" is discussed below. Before turning to that however I want to discuss the intermediate situation of Tamil Nadu, described in two monographs by Djurfeldt and Lindberg [26, 27].

Although I share the general orientation of these authors I find their work difficult to use for, I think, three reasons. First, in a way that should make their work attractive to American sociologists if not anthropologists, they prefer counting attributes to analyzing cases. The reader is frustrated by the knowledge that they present in any detail only one case out of the one hundred and forty they confess to have collected. Second the classifications by which they proceed (and this may appeal too; see [33] *passim*, especially Kleinman and Fabrega) are not theoretical but typological. Thus healing is classified in terms of three types: common sense, technically instrumental, and religious. Diseases are then similarly classified but with a greater number of categories; and finally healers have their turn according to the methods they use and the diseases they treat. Finally, and most importantly, the Marxist theory that they do use involves (as well as confusing the diametrically

opposed views of Godelier and Althusser on Ideology) an apparent assumption that changes in infrastructure are determining in all instances and not just the last instance—thus their solution to all problems of India is in a sense correctly "that only a radical transformation of the economic structure can produce the really forceful weapons to wage the battle against disease..." This leaves aside at least two fundamental problems namely (1) What measures for health improvement are possible within the framework of existing society (tactics) and what impact will the social process of bringing about these measures have on the ability of the social formation to reproduce itself with its existing production relations (strategic implications); and (2) What aspects of the production of disease and of health care at the local level will be changed by the process of transforming economic structure? I suspect that the answer to the second will initially be very little—gross social change *may* be a necessary cause for local medical change. Experience in China and elsewhere suggests it is certainly not sufficient.

In their book *Behind Poverty* [26] Djurfeldt and Lindberg argue that the rituals in general of Harijans and indeed their conversation reflect two competing and complementary ideologies. (I leave aside the authors' false consciousness of Harijan false consciousness—in fact, of course, neither ideology is false; they are both true to the partial contexts in which they arise, which they reinforce and which reinforce them.) These two ideologies are caste and class—*jati* and bourgeois. Thus because all caste brothers are equal in the eyes of the Goddess, they will help each other. Because they are unequal in economic terms, such help will need to be given. Relations of exploitations both explain the inequality and determine the direction of the help—if it is a loan, the decision to grant one at all will be decided on the basis of caste; the amount and timing of repayment and interest is a matter of class [26, pp. 238–239]. The authors report a conversation with a chronic asthmatic:

If I take ill suddenly, I have to consult a private doctor in Kelambakkam. Then I need at least two rupees. Such expenses are usually covered by my cousin brother, Naguran. He gives me one or two rupees whenever I need. Is your cousin such a kind-hearted man?

Veerabadran laughed: It is no case of generosity. He is just paying for the services rendered by my eldest son who stays with him, grazing his cattle and doing other odd jobs. What do you think would happen if I called back my son and sent him to school instead? My so-called kind-hearted cousin would just turn his back upon me, even if I was suffocated to death by my breathing difficulties [26, p. 238].

Djurfeldt and Lindberg do not report any similar conversation with Naguran who perhaps might have said, "I can just manage to stay prosperous because my cousin allows his son to work for me." "He must be very generous?" "Oh no, I have to pay his medical expenses; if I stopped doing that he would soon take his son away and leave me to struggle as best I can." The ideology clearly has a differential impact and usefulness. Djurfeldt and Lindberg's main analysis of it comes in their description of the annual ceremony of the Mariamma (Mother-Goddess) Cult, *Adi-Kappu*.

They argue that the social relations symbolized within it are now, like those described above, intra-caste rather than inter-caste (*jajmani*) and that this is an advance.

In the past [26, p. 250] the symbols of the ceremony and its organization stated the unity of society and all its castes, since all were present, and all contributed financially and by participating in the shared out sacrifice. But the complementary, hierarchical nature of relations of *jati* and *jajmani* was also reaffirmed (as well as the position of women and young family members. See discussion of kinship usage [26, p. 241]).

In the ceremony they witnessed and described, only one caste took part. It is a ceremony in one village, in one temple to one named goddess, Mariyamma. Other villages and temples celebrate other goddesses; villages are separate one from another. All the goddesses (they counted 25) are in a sense manifestations of the one goddess, Amman; villages are united one with another. The Goddess is seen (emically) as controlling relationships between society and nature.

"The aim of the *Adi Kappu* ceremony is to ensure the benevolence of Amman so that the crops may grow, the cows may calf (*sic*) and the women bear children, and so that no calamity may afflict the village." "Only indirectly" is the ceremony concerned with social relations. The ceremony is in fact an exercise in preventive medicine and a symbolic statement about the most general social and natural significance of disease, illness and sickness.

The costs of the ceremony were met out of funds collected by the village caste council (*jati panchayat*). "Rich families gave generously to show off and gain in prestige, and the poor had contributed a rupee or so from their lean purses." The ceremony [26, p. 245] consists of music, drumming and dancing until one man goes into a trance and is possessed by the Goddess who speaks through him. Questioned, the Goddess complained of the lack of a ceremony the year before, and a mere sacrificial hen the year before that. In response, her idol was brought out of the shrine and presented by three priests from a neighboring village with five big pots of porridge, fruits, sweets and a goat. After the sacrifice of the goat, three women wives of the priests dipped their hands in the goat's blood and then washed them in water, purifying the village of its sins. The authors do not explain why outsiders and women at that, take on responsibility for the sins of the village. I would argue that any individual village wife could cleanse only her own sins. This is the answer to Furer-Haimendorf's too literal view (quoted in [26, p. 244]) that virgins cannot be mother goddesses. On the contrary, mothers, with the exception of the significant Holy Mary, Mother of God, have only finite fecundity; the potential of virgins is infinite because never realized. Religion is, after all, concerned with making ideal, not making real. By participating in the ceremony, the priests (*pujari*) become surrogates for the whole village which their wives, non-villagers and non-men, can then take on and cleanse. Only non-villagers and non-men can represent all villagers and all men. (I am however only guessing on general theoretical rather than on specific ethnographic grounds.)

The authors argue that this ceremony reveals two elements of ideological significance—equality between equals and solidarity between non-equals.

Each member of the community should eat of the sacrificed food, as a manifestation of their equality before God (*sic*). Thus, the community approaches God as a collective, and communicates with Her through its representatives, the priest and the God-dancers. Afterwards the community shares the food sacrificed to God, as a manifestation of universal and equal membership of the collective body, which is the unit recognized by God. Solidarity, on the other hand, is stressed in the way of financing the ceremony, where the rich pay more than the poor; and in the food distribution, where all are entitled to a share, but where the poor have the right to receive more [26, p. 247].

They argue that the combined equality/solidarity of the ceremony is in sharp contrast to the "bitter reality" of everyday life—and the purification is a reconfirmation of the social order by asserting that unless man plays his role in the universe, by accepting his lot and his position, nature will cease to play her role too. This is the main annual ritual of the hamlet, but unless the goddess was mistaken or forgetful (the authors do not tell us) it does not appear to have taken place every year or when it did with equal expenditure. A more frequent renewal of social and natural order comes as Young has led us to suspect, with episodes of sickness.

Here, however, a multiple pluralism intervenes. Not only is there a choice between allopathic and "indigenous" pathways to healing, but each of these pathways branch in their turn. Those who follow allopathy can choose the Swedish Swallows Clinic in the village, private doctors in nearby towns, or government hospitals and clinics elsewhere. The authors number at least eight indigenous types of healer: Vaitiyan (doctors), specialists like snakebite curers, midwives, Manthiravathy (sorcerers), exorcists, God-dancers, priests, and astrologers. Nor is any one specific healer necessarily confined to one of these types.

The authors adopt, on the whole, a biomedical model of efficacy and show fairly convincingly that, from the point of view of patients, there appears to be little difference in the efficacy of the two pathways in general [27, Table 8.1, p. 169]. They attribute this to the failure of the allopaths to live up to their own rationality in regard to use of resources, the imbalance between preventive and curative measures and the fact that the real "disease" is poverty which in rural India as in urban United States cannot be "cured" by medicine in either sense of the word. However their view that:

the persistence of the indigenous system (but of course not its genesis) and the reproduced cleavage of the medical system into two parts can be seen as a result of the inefficiency and irrationality of the allopathic one [27].

is surely simplistic in the light of their own analysis.

Perhaps part of the reason for this is their failure to distinguish between emic views (theories) of disease and illness and sickness behavior. Thus in rural South India, not only are there common sense explanations for disease in terms of poverty, water supply and the like, but there is a secular tradition of instrumental action. Since this is often outside or partially outside



religious activity they tend to ignore its ritual aspect.

The other difficulty in this part of the analysis is that following Levi-Strauss and Godelier (themselves perhaps limping behind Frazer and Tylor), they adopt an intellectualist view and analyze beliefs not in terms of the relationships of their production [34, 35] but in terms of supposedly universal patterns of human analogical thinking. For this reason, the only comparisons we are here able to make are the ritual and ideological nature of indigenous religious practice and that of allopathic medicine as represented in its local practitioners.

Recourse to the Swallows Clinic may on occasion be efficacious in biomedical terms, particularly for example against acute fevers. It does, however, involve submission to a Western system of values. For example, there are fixed days for different causes of consultation—a secular split between the disease and the patient which baffles the villagers who comment, "Maybe you can teach people to come on different days but you cannot teach fever to come on Mondays" [27, p. 109]. Again the clinic preaches in opposition to village ideology, complete egalitarianism between rich and poor, high caste and harijan. However within its own operation, nurses, doctors and aides are hierarchically ordered with differential access to power, information and authority and all are seen as superior to patients. In addition, the clinic staff are seen as treating patients with equal lack of respect rather than with equal respect:

They do not step down from their position. They arrange the queues, and often which is natural in such a situation, they are overly strict and irritated. Many people are hurt by this lack of friendliness and consideration. As one patient said: "In Thaiyur clinic they even ask the babies to keep quiet!" Or, as an experienced old woman said: "All the time they give you a red, a white and a yellow (vitamin) tablet, and then they just say, 'Nalla poyidum Pol' (You will get cured. Go!)" The clinic personnel use the impolite and condescending *po* instead of *poyte vange* which is the correct imperative to use between mutually respectful strangers [27, p. 111].

There is a drama hidden from the villagers but which they react to in allopathic behavior and which reaffirms European capitalist values. In Parsonian terms, it is concerned with system maintenance both at the clinical and the supraclinical level. Another example of it in the book under review, is the behavior of the allopathic physician who both conducted the nearest Government of India Clinic in the day time and his own private practice in the evening, and who "did not give any treatment to the child, probably because he thought it beyond recovery. His assumption was right, for the next day the child died in hospital." He did, however, refer it to Madras Childrens Hospital. The author's conclusion that the mother had no reason in this case to be impressed by allopathic medicine can be supplemented by the fact that as far as this physician was concerned, his dramatic abstention at least avoided blame. The authors point out that allopathic doctors in India, unlike local religious practitioners, do not have the deified status that they enjoy in the West (this may be related to their status as professionals; see Jeffery [36] and Frankenberg's rejoinder [13]). They might have added that their rituals reflect an ideology (beliefs and

practices) which is here out of context. The queue and the authority of hierarchy are, in the West, and under capitalism, precisely part of the mystique. So also are the other differences they mention; the overt modesty in prediction and the employment of subordinates to mix and administer medicines [27, pp. 172–173]. In advanced capitalist countries these features are reinforced by the similarity in behavior of other professionals and employers and by a cultural awareness fed by television and film series and as we shall see by stories.

Indian religious curing uses dramatic performance in a more culturally directly visible way as we have already seen in the *Adi Kappu* ceremony described with its temple backcloth and *pandal* (ceremonial canopy) setting. This essentially preventive and background creating ceremony can be used therapeutically as well as the authors describe in the context of the deliberate provoking of anxiety as a therapeutic device, and then as an example of *acting-out*—in other words they consider it in relation to disease and to illness. While neither of these is necessarily incorrect, both are incomplete. What the case tells the social anthropologist is a reaffirmation of social values by a group—the family—whose failure to reproduce itself presents a challenge to the values. As the authors say, the probable infertility of the male son and brother as a threat to the group is dramatically redefined as supernatural, evil possession of a female and therefore socially unimportant outsider, so dispensable that she is encouraged to commit suicide. The further elaboration I am suggesting is important in the authors' own terms of interest in social change since it implies that biological and psychological enlightenment would not, as they suggest, in themselves produce such change. Indeed, they might not even be possible, without a prior change of social organization even more fundamental than that the authors envisage. (See and compare Norma Diamond on political impact of village exogamy in China [36].)

Naidu's brother's second wife had failed to conceive a child. His first wife gave birth to two sons when they were newly married. But both died, and then she did not conceive for 15 years. So they decided to send her back to her parents. Then Naidu's brother married his present young girl-wife. But that did not solve his problems. It seems the young girl was put under heavy pressure in her husband's family. Anybody would be unhappy being submitted to Naidu's old mother's regime. She is a miserly old tyrant; and she is the real head of the family. Besides being the youngest daughter-in-law, this girl failed to conceive. No wonder she was unhappy! Her anxiety was converted into a typical physical symptom: she developed spasms in her legs and chest pain. They took her to a *manthiravathi* who gave her a talisman. That was two years ago. The talisman cured her from her spasms and the pains, but not from her childlessness. Recently she lost the talisman, and her symptoms returned.

When *Adi Kappu* was celebrated in 1972 the family tried to solve their problems using God as a therapist. During the Mariamma ceremony one brother-in-law first became possessed. He diagnosed the family troubles as due to evil eyes and spirits. He even drove one spirit out of the house. But this did not set the family at ease. The suspicion still remained that somebody in the family must also be possessed by an evil spirit. Then, later during the ceremony, Naidu's old father became possessed. He pointed out the young girl and said, "You are the one who is possessed by



an evil spirit!" The priests who led the ceremonies decided to try exorcism later in the evening. When they were preparing for the ritual, Naidu's brother-in-law became possessed again. He started to dance, swinging a bunch of neem leaves in the air. The girl was lying on the floor with an acute attack of spasms. The priests recited their *manthiram*. Suddenly one of them said: "It is very difficult to rid you of the spirit. If you cannot get rid of it, you'd better commit suicide!" Apparently, the other *pujari* felt he had gone too far, because they pushed him off saying: "This is not the right *manthiram* for this occasion. Let us stop here, and try some other *manthiram*, some other time." The ceremony was interrupted. All sat down and had their food [27, pp. 174-175].

Another case they briefly describe in terms of anxiety arousal can again be seen in terms of the mobilization of community concern for the recovery of sick (hysterical?) boy. It also illustrates the potential of Caillois categories already referred to as an extension of Young's approach.

The boy had been nearly run over by a jeep some weeks before, and since then he had frequently wept and could neither eat nor sleep. He was taken by his mother to a ceremony in the Madurai Veeran temple in Periapillari. There a man danced before the God and became possessed by Him. He was a frightening figure brandishing a sword and dancing in front of the boy who was standing alone in a big circle of devotees. The boy was pale and sweating, terror-struck by the God appearing before him. The dancer was going through a crescendo, dancing in a circle around the boy, coming closer and closer, brandishing the sword closer and closer to him. The climax came when he suddenly struck the boy fiercely with the sword. The boy broke down, deeply shocked, and had to be taken care of by his mother. We don't know the outcome of this case. We can imagine that the therapy was not very effective [27, p. 173].

We can finally accept Djurfeldt and Lindberg's conclusion that there is a pluralistic equilibrium in Thaiyur and by implication elsewhere in Tamil Nadu and South India but we have argued that the understanding of this equilibrium requires a more complex, because more sociological, model of the drama of sickness.

As a final example I turn briefly to a study of consultation in general practice in a British town although I do not have space to do justice to its fascinating ethnography. We have to see this against a background of medical culture which the authors do not specify. While the allopathic system is here dominant, and access to hospitals, consultants, etc. is by way of the general practitioners studied, clearly most ailments do not find their way into the hands of healers at all [37] and some like those in Vieda Skultans' study [11] in the same town seek, as well or instead, spiritual or other forms of healing seen as less orthodox. The patients discussed enter into consultation after lay discussion and, as we shall see, evaluate consultation in their own non-medical environment. This environment is colored by popular lore about health and disease and by ideologies of the medical system transmitted, reinforced and sometimes created by ever popular television series, romantic novels and newspaper anecdotes.

The key chapter for our purposes is the one in which the authors describe the "stories" told infor-

mally by patients about doctors and their encounters with them. As they correctly point out such stories are

... a form of communication (1) which highlight a process by which people make sense of past events, (2) in which certain standards of behavior of doctors and patients emerge, are sustained or are changed, and (3) in which some redress is made for the inequalities in the relations between the client and the professional. The story is thus a means of accounting for or explaining the social world of doctors and patients, is a means for the negotiation of norms and affirms the integrity of the patient [4, p. 90].

Let me give two brief examples of parts of such stories.

Now, I had, I've got a bunion see, this was a scream. I was in agony with it, it turned septic. Well, I went down to the hospital now, and they laid me on a bed in a room, and well the doctors come in like that at Cranfield, in the doors. Well, I laid there for two hours with my shoe off, and Mr Brondey came in and looked and said, "Do you want an operation?" "I don't know," I said. "Fair enough," he said, and that was that. I thought—well—I went over to my doctor raving. I said it was his place to tell me if I needed an operation. He didn't even touch me [4, p. 88].

(I think Cranfield is the site of a television series hospital—R.F.)

The other story I wish to quote illustrates *interalia* the importance of labelling terms—lumbago and sciatica—and the rebellion against doctors which reinforces allopathic medicine.

Teller: Dr Fletcher is marvellous. I've got complete faith in him, I trust him completely. Anything he says, that's right by me. Now Bailey I don't like. There was this time when I had this terrible pain in my back. I was dragging myself around—I had to go on because of the baby, but it went on and on, it was driving me mad, I couldn't stand it any more. So my husband called for the doctor and Fletcher couldn't come, it was Bailey's day for home visits. And honestly, without a word of a lie, he was in the door, took one look at me, and said, "Lumbago, you'll have to take it easy". That's all he said and was gone. I didn't have a chance to ask anything, nor did my husband, he was out of the house too fast. We just looked at each other in amazement.

Interviewer: Didn't he do anything, didn't he give you anything for it?

Teller: No, he didn't give me anything for it—and I ask you how can you take it easy with a young baby? Well, I wasn't satisfied, and Fletcher who came out to see me a few days later because it was no better said it was sciatica, which it was, and treated me for it. He appreciated I couldn't drop everything with a young baby to look after [4, pp. 104-105].

Unlike other conversations, even those about disease, death and doctors, stories have a dramatic ritual character. When the authors listened to their tapes, they found only one person spoke at a time in storytelling. Not only was there an audience but it was an audience which listened and empathized. It interrupted only to prompt and stimulate detail in the often familiar and often repeated tales. The stories had dramatic form and quality: a scene was set—hospital, home or consulting room—the characters were introduced—doctors, patients and supporters—a conflict of meaning and interpretation was presented and analyzed. Finally, the story has an exclamatory coda in which a moral is drawn. The stories were not

intended to be nor taken by their hearers to be apocryphal. They were essentially eye-witness tales—in which the actor/narrator was made to be (in retrospect) the active generator of events but nevertheless in the end, the victim also. In the rest of the study, we learn that the active role of patients in deciding when to consult and what to consult about which initiates patient/doctor interaction, is in the consultation interview itself, reduced to near passivity. The doctor invites the patient in, questions, examines, probes, comments, writes notes, prescribes and dismisses. He (almost invariably he) does all this in a firm, controlled, loudspoken, linguistically formal way. The patient listens, accepts and respects while she is in the consulting room. Action is determined outside at a different time, in a different interpersonal social context. The doctor's social context is bureaucratic, organized, rational—backed by a whole major industry and a clearly formulated ideology and culture. It is at its most essential concerned with pathological interruptions to biological processes. The patient's is personal, particularistic—and organized and rational in a different way. It is concerned with interruptions in a social process. The story reconciles the two and reverses the realities—passive/active, powerful/powerless, disease/illness. It is interesting that when the stories are challenged, their "reality" is defended by introducing new characters from the personal milieu—a husband or relative, or a personalized doctor rather than the incumbent of a doctor role. The authors did not collect or analyze doctor's stories but one knows from other contexts that these are not concerned with the same problems. They may be about patients unsuccessful attempts to sabotage the social order, or to refuse the medical definition of the situation. Or they may illustrate the hierarchical inequalities and attendant stupidities of physicians in other positions than the speaker—the social ignorance of the technically brilliant hospital consultant—or the similarity to the patient's ignorance of that of the general practitioner—in the eyes of the consultant so poorly trained, so long ago.

The authors conclude:

Storytelling is significant in terms of social control. It is both an appeal for action but at the same time an appeal to inaction. It is an appeal to action in that a latent function of the stories is in coaching people about how to behave in front of doctors, giving them recipes for action, warning them what to expect. But at the same time they appeal to inaction over those things that go wrong. Conflict is expressed not to the other actor in the situation, but to others who have no, limited, or very little power to do anything. A kind of fatalism is implicit. A picture comes across of the stoic, patient of the hardships (illness) and difficulties (doctors) of life [4, p. 111].

From our point of view, it is the last sentence here that needs spelling out—in Swansea, as in Ethiopia and India, disease provides an opportunity for the dramatic statement, reinforcement and restatement of ideological and social realities. But like the ideology itself, the statement is diffused over space and time. The experience of sickness—socialized disease—is not focussed for most people, most of the time, on a single dramatic incident or ritual. It is built up through specific cultural forms (TV, newspapers, novels), through isolated transactions of a quasicommercial

exchange character, through isolated and isolating individual experience, through power-asymmetric dyadic relationships, and through a specific folk lore—which is situated in space and time, with an audience and in a social context. It involves not merely a cultural statement about what it means to be ill, but a social statement about sickness in process. This kind of mythic ideological representation can become destructive of the system but only if it is organized from outside and by a counter theory. The same stories repeated within a framework of gender consciousness raising, patients association rebellion, or overturning of status divisions in a Chinese village could (and at times have) become the tinder of revolution. The British National Health Service, of course, provides no such environment which could convert them to the material of radical social change.

#### PROCESSES OF ANTHROPOLOGICAL ANALYSIS

There has been implied in what I have said up to this point, a particular view of anthropology and its methods which is not universally accepted or indeed acceptable and which must now be brought into the open. As I see it (following I think, Max Gluckman) the aim of the anthropologist is not merely to describe local custom, or even to show the manner in which diverse customs at a local level or in a particular society fit together in a more or less coherent cultural pattern. We have to go beyond this, at least to the extent of situating customs in the context of local social structural process (even if we thereby risk an accusation of structural-functionalism). It is because they do this I would suggest that classical writers as diverse as Evans-Pritchard on the Azande, Levi-Strauss on Myth, Radcliffe-Brown on Australian Marriage, and Herskovits on East African Cattle are recognizably engaged in a similar exercise. This does not, of course, mean that we have to accept their analyses. These we judge further by their adequacy to the problems they set themselves, the importance of the problems, and the internal consistency of their arguments.

I am, however, here arguing that we have to go beyond even this and to judge the analysis of custom and social process at local level by the degree to which it helps to explain the articulation of levels. If processes of social interaction are producing customs at the level of the village, how are these articulated with ideological, political and economic systems at national and even international levels. It is a criticism both of British sociology and anthropology as well as of ourselves that on return from Lusaka, Leeson and I were constrained to produce two papers—one, Intermediate Technology and Medical Care, was correctly foreseen as interesting sociologists, hardly mentioned traditional medicine, and discussed the emergence of Western medicine in the context of Zambian class relations, and world politics. The other, although even then tangential to the exclusive interests of many British social anthropologists, ignored this general context and concentrated on the nature of the Nganga's activity—social aspects of choice of healer.

Social anthropology is unwise (as is sociology) to confine itself in this way for it seems to me that it can potentially reveal the "missing link" without which

the analysis of major social change founders (for lack of an anchor chain); what effects are produced at local level by national and international social processes; and what is coming from local level in return.

Read in the way suggested here, Djurfeldt and Lindberg and even Stimson and Webb can be seen as situating local promise and non-fulfillment first in the context of continuous and pressing problematic relationships between individuals and groups of differential power competing unequally for resources. Secondly, they enable analysis of the role of intermittent and continuous misfortune in providing a medium for the reiteration of ideology with all its internal contradictions. Moving from the local level we are able to see how the emergence of "elite" ruling classes in India and Africa, to be sure, but also in Britain and the U.S.A., feeds upon and reinforces practices and beliefs at that level. I have described the Rhetoric/Ideology division which is part of the Culture of Medicine as a whole, shared by patients and physicians—and which in terms of Western medicine emphasizes the literally concrete, the concretely literal, and the individual in dyadic relationship with his doctor, his gymnasium or his running clothes as responsible for his/her own health. Even preventive medicine is here reduced to a curative, individualistic model which reinforces general capitalist views on how social problems should be treated—the familiar paradox of personal social services. Finally at the broadest level the international political economy of medicine, dominated by great powers, themselves dominated by monopoly capitalist enterprise with an abiding interest in peddling pills and selling massive capital equipment, as well as changing the nutritional habits of the world's peoples in order to sell their products.

I would argue that a medical anthropology focussed on the making social of sickness can contribute to understanding at all three levels; it also enables us (as I suggest the mere disease/illness dichotomy does not) to go beyond merely helping physicians (whether allopathic or traditional) to confirm their occupationally and inevitably narrow view of the health process. Health institutions and folk society are not cultures in contact, as we can all now see, Malinowski wrongly categorized whites and blacks in Africa in the thirties [38]. They share their personnel, their social roles and their political economic context. Paradoxically but unsurprisingly Western social scientists have usually rejected the social process in favor of the individual attribute.

In medical anthropology, there is opportunity to turn over a new leaf.

#### REFERENCES

1. Frankenberg R. J. The beginning of anthropology: the challenge of the new Africa to the sociological study of small-scale social process. In *Proceedings of VIIIth Congress of Anthropological and Ethnological Sciences*, Tokyo, 1968.
2. Sachs W. *Black Hamlet*. Little Brown, Boston, 1947.
3. Freidson E. *Profession of Medicine*. Dodd Mead, New York, 1975.
4. Stimson G. and Webb B. *Going to See the Doctor: The Consultation Process in General Practice*. Routledge & Kegan Paul, Swansea, 1975.
5. Turner V. W. Muchona the Hornet, interpreter of religion. In *In the Company of Man* (Edited by Casagrande J.). Harper, New York, 1960.
6. Douglas M. (Ed.) *Witchcraft Confessions and Accusations*. Tavistock, London, 1970.
7. Frankenberg R. J. and Leeson J. Disease, illness, and sickness: social aspects of the choice of healer in a Lusaka suburb. In *Social Anthropology and Medicine* (Edited by Loudon J.). Academic Press, New York, 1976.
8. Boswell D. *Escorts of Hospital Patients: A Preliminary Report on a Social Survey Undertaken at Lusaka Central Hospital from July–August 1964*. Rhodes Livingstone Institute Communication 29, Lusaka, 1965.
9. Young A. Some implications of medical beliefs and practices for social anthropology. *Am. Anthropol.* 78, 5, 1976.
10. Skultans V. Empathy and healing: aspects of spiritualist ritual. In *Social Anthropology and Medicine* (Edited by Loudon J.). Academic Press, New York, 1976.
11. Salisbury R. F. *From Stone to Steel*. Melbourne Univ. Press, Melbourne, 1962.
12. Evans-Pritchard E. E. *Witchcraft, Oracles and Magic among the Azande*. Clarendon Press, Oxford, 1937.
13. Frankenberg R. J. Allopathic medicine, profession and capitalist ideology in India. In *Soc. Sci. Med.* Forthcoming.
14. Brown G. W. and Harris T. *Social Origins of Depression: A Study of Psychiatric Disorder in Women*. Tavistock, London, 1978.
15. Leeson J. and Gray J. *Women and Medicine*. Tavistock, London, 1978.
16. Fabrega H. *Disease and Social Behavior*. M.I.T. Press, Cambridge, MA, 1973.
17. Kleinman A. Concepts and a model for the comparison of medical systems as cultural systems. *Soc. Sci. Med.* 12, 85, 1978.
18. Gamarnikov E. Sexual division of labour: the case of nursing. In *Feminism and Materialism: Women and Modes of Production* (Edited by Kuhn A. and Wolpe A.-M. Routledge & Kegan Paul, London, 1978.
19. Ashley J. A. *Hospitals, Paternalism and the Role of the Nurse*. Teachers College Press, Columbia, New York, 1976.
20. Schulman S. Mother surrogate—after a decade. In *Patients, Physicians and Illness*. (Edited by Gartley Jaco E.). Free Press, New York, 1972.
21. Jayaraman R. The professional medical assistant in Zambia. From *East African Social Science Conference*, Makerere, 1970.
22. Frankenberg R. & Leeson J. The sociology of health dilemmas in the post-colonial world: intermediate technology and medical care in Zambia, Zaire and China. In *Sociology and Development*. (Edited by Kad E. de and Williams G.). Tavistock, London, 1973.
23. Turner V. W. *The Forest of Symbols: Aspects of Ndembo Ritual*. Cornell, Ithaca, 1970.
24. Lewis I. M. *Ecstatic Religion*. Penguin Books, Harmondsworth, 1971.
25. Levi-Strauss C. The sorcerer and his magic. In *Structural Anthropology*. Basic Books, New York, 1963.
26. Djurfeldt G. & Lindberg S. *Behind Poverty: The Social Formation in a Tamil Village*. Curzon Press, London, 1975.
27. Djurfeldt G. & Lindberg S. *Pills Against Poverty: A Study of the Introduction of Western Medicine in a Tamil Village*. Curzon Press, London, 1975.
28. Caillois R. *Man, Play and Games*. Free Press of Glencoe, New York, 1961.
29. Frankenberg, R. J. People at play. In *Man in Society* (Edited by Douglas M.). Macdonald, London, 1964.
30. Frankenberg R. J. Sport and games. Crystal Palace lecture. Unpublished, 1966.

31. Butler S. *Erewhon*.
32. Lewis G. A view of sickness in New Guinea. In *Social Anthropology and Medicine* (Edited by Loudon J. B.). Academic Press, London, 1976.
33. Leslie C. (Ed.) Theoretical foundations for the comparative study of medical systems. *Soc. Sci. Med.* **12**, Special Issue, 1978.
34. Young A. Mode of production of medical knowledge. *Med. Anthropol.* **2**, 2, 1978.
35. Foucault M. *The Archaeology of Knowledge*. Tavistock, London, 1972.
36. Diamond N. Collectivization, kinship and the status of women in rural China. *Toward an Anthropology of Women* (Edited by Reiter R. R.). Monthly Review Press, New York, 1975.
37. Kleinman A., Eisenberg L. and Good B. Culture, illness and cure: clinical lessons from anthropologic and crosscultural research. *Ann. intern. Med.* **88**, 251, 1978.
38. Gluckman M. *Order and Rebellion in Tribal Africa*, Chap. 8, pp. 207-234. Free Press of Glencoe, New York, 1961. (First published in *Africa*, 1946.)



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## MEDICAL PLURALISM AND HOMOEOPATHY: A GEOGRAPHIC PERSPECTIVE

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**Abstract**—This paper examines homoeopathy in India within the broader framework of growing scholarly interest in medical pluralism in the developing countries.

It is argued that the entry of Western medicine in India, which included homoeopathy in the nineteenth century, has significantly contributed to medical pluralism. The spatial dimension of homoeopathy in India in relation to other medicine systems has been examined. Thus, some observations have been made about the spread of homoeopathy, the role of the Bengalis in it, and the manner in which homoeopathy has become part of the process of medical pluralism.

### INTRODUCTION

Medical pluralism may be briefly defined as the synchronic existence in a society of more than one medicine system grounded in different principles or based on different world views. However, W. T. Jones' caution might be stated in the beginning; that is, we must "free ourselves from the illusion that Western medical science is true, and that other views, to the extent that they deviate from ours, are false" [1]. In the Indian context the chief systemic components of medical pluralism are allopathy, *ayurveda*, homoeopathy, and *unani*.

"Allopathy" in India refers to the cosmopolitan, or "Western" system of medicine and is synonymous with *angrezi* (English) system. It is also referred to as the "modern" system of medicine. Practitioners of this system are called doctors.

*Ayurveda*, literally "the knowledge of life", refers to the vast body of ancient Hindu literature concerned with health, disease and longevity. The traditional practitioners of this system are usually called *vaidyas* or *vaid*s. Within the profession there is controversy between those who wish to strictly follow the ancient tradition (*Shuddha*) and those who find integration of ancient with modern medicine necessary.

The *Unani* (Ionian) tradition of medicine came to India through Islam and its traditional practitioners are usually referred to as *hakims*. Medical graduates of the *Unani* as well as of *ayurveda* are now called doctors.

Homoeopathy as a system of healing was developed by Samuel Hahnemann, a German physician, toward the end of the eighteenth century. It is grounded on the "law" of similars, "*similia similibus curantur*", i.e. let likes be cured by likes. Hahnemann had insisted also on using a single remedy for a particular cluster of symptoms found in an individual, as well as on administering minute doses of the selected remedy. Among homoeopaths there is some controversy about the single remedy principle.

The purpose of this paper is twofold. First, to state some of the reasons underlying the recent scholarly interest in medical pluralism and to identify some relatively neglected aspects of it. Second, to examine the spatial dimension of homoeopathy in India and its role in medical pluralism in the light of the history

of its spread following its introduction to India in the nineteenth century.

### WHY DO SOCIAL SCIENTISTS SEEM TO BE CONCERNED ABOUT MEDICAL PLURALISM?

Medical pluralism appears to have attracted considerable attention of social scientists concerned with health issues of the less developed countries, creating the impression that such pluralism is exclusively endemic within non-Western societies. For example, Alan Beals has posited that pluralism in the Indian concepts of diseases and their treatment is essentially a reflection of the Indian universe, which is complex, pluralistic and hierarchical [2]. It seems to me that pluralism is not peculiar to India or to the developing world. In the Nineteenth Century America several "systems" of healing were practiced, such as eclecticism, homoeopathy, hydropathy, and Christian Science to which osteopathy was added at the turn of the century. Even today there are many types of healers in the United States whose offices and clinics reflect the many symbols of modern technology, but whose philosophies of healing do differ from one another. Such healers include among others, the osteopaths, chiropractors, podiatrists, faith healers, herbalists, astrologers, counselors, and the like. A cursory examination of the 1978 "Yellow Pages" of the telephone directory of Akron, Ohio reveals that apart from about 550 M.D.'s office listings, there are 68 office listings for the osteopathic physicians and surgeons (D.O.s), 26 chiropractors, and 34 podiatrists. It may be argued that doctors of osteopathy are no longer significantly differently trained than the doctors of medicine [3]. Nevertheless, the M.D.'s generally seem to consider themselves more scientific and better trained than the osteopaths. The chiropractors certainly are not considered physicians in the legal sense of the word even though they claim to be a "complete separate health science" [4]. Not uncommonly, they may be considered by some patients as healers of the last resort and of special conditions. The point is that even in the most technologically advanced society there is a variety of healing systems although such pluralism has been usually associated with the non-Western cultures only. As yet a medical

"melting pot" does not seem to exist, except perhaps in China.

Interest in medical pluralism seems to be based on several factors. First, ethnographic inquiries have often included description of the arts of healing as part of their normal study of the many cultures of the less developed world. Thus, for example, "Concepts of Disease Causation and Cure" forms a chapter in Oscar Lewis' monograph on *Village Life in Northern India* [5]. Since most of the developing world was at one time under the domination of one or the other Western colonial nations, Western medicine in several variant forms was introduced there to varying degrees. This process generated conditions of medical pluralism just as in several areas "plural societies" were created by colonialism [6].

Secondly, the rising tide of nationalism in the developing world has been frequently reflected in the revival of several indigenous values and symbols including the heritage of healing arts. These revivals have given prestige to some indigenous healing concepts and practices. In the case of India, such revivalism has additionally meant the development of articulate, frequently politicized, and increasingly professionalized "indigenous" systems of medicine. The reports of the committees appointed by the state and central government of India attest to this tendency [7]. This issue has been studied in detail by Charles Leslie [8] and Paul Brass [9] with respect to ayurveda's revival.

Thirdly, the rapid population growth, the current state of public health, and consequently the need for medical manpower unfulfilled by the 'Western' trained medical and paramedical staff, has led to official assessments aiming at the possible use of a variety of indigenous healers. In India, The Committee on Indigenous Systems of Medicine had argued thirty years ago that vaidyas and hakims being distributed in the rural areas more than Western type doctors, are logistically and sociologically more accessible; they are also more sympathetic, and less expensive [10]. They were therefore recommended to be a major component of the Indian medical manpower. Such recommendations have helped to bring out interprofessional philosophical divergencies between indigenous and modern systems of medicine. Thus, conceptual and practical issues concerning medical pluralism have begun to be addressed.

Fourthly, the apparently successful systemic integration of indigenous and Western type medical/paramedical manpower into one health system by China has created a reference model by which social scientists seem to compare health systems in other countries [11, 12]. Finally, it may be speculated that growing criticism of the highly technologized Western medicine with its attendant heavy user costs and human de-emphasis may have generated among Western social scientists some interests in other health cultures. Growing talk in the United States about "family practice" and holistic medicine may be an indication of such interest. The editor of the prestigious journal *Science* has observed that in the U.S. "both research and care are focused too strongly on cardiovascular diseases and cancer and on using medicine and technology to prolong burdensome and meaningless existence" [13]. Engel emphasizes in the context of scientific medicine that the "dominant

model of disease today is biomedical with molecular biology its basic scientific discipline... It leaves no room within its framework for the social, psychological, and behavioral dimensions of illness" [14]. It may be noted that in contrast with the technology-dominant Western medicine system, the proponents of the indigenous Indian systems of medicine and homoeopathy have consistently claimed humane, personalized, inexpensive and sympathetic care as a hallmark of their systems. Homoeopathy has always emphasized treatment of the *whole person* rather than of a single symptom in a patient.

Whatever the causes involved in the recent academic interest in medical pluralism, the fact is that several scholars are now studying this phenomenon, and many have advocated the incorporation of indigenous traditional medicine "practitioners" in some sort of integrated health care system [15].

#### *Two neglected dimensions in medical pluralism*

Studies of medical pluralism have tended to give limited attention to two facets of the problems. First, in spite of the overall explicit recognition of several "systems" of cure or healing, their regional-spatial variations are not brought out. This, as will be shown later, can open up some interesting questions. Secondly, the role of Western medicine itself as an active component in the development of medical pluralism has been only slightly explored.

The word "Western" has become a sociological construct which is freely used to convey or evoke modernity, technology, scientific attitudes and materialistic ideology with emphasis on monism (and standardization) rather than the acceptance of diversity as a norm. Within the context of medicine, at least, particularly during the era of colonial expansion in India, Western medicine was no unitary, standardized system of cure, and a substantial part of it, in practice, had little to do with what we might now call "modern". Certainly, the concepts of blood letting, purging, heroic doses and the like which were then widely practiced cannot be considered modern even in the 19th century context. Western medicine itself was composed of several streams of thought, some bitterly antagonistic to each other—such as "homoeopathy" and "allopathy" [16], not to speak of a variety of systems such as mesmerism, galvanism, hydrotherapy, naturopathy and the like [17]. It is not my purpose in this paper to develop this argument further, except to suggest that "Western" medicine when it began to enter India in the 19th Century was itself pluralistic. In India of that time period, various indigenous traditions of medicine were present, but there was neither the European style professionalization nor probably their bitter interprofessional antagonism. In fact, accommodation and mutual exchange between the ayurvedic and unani systems seems to have been common [18]. Medical pluralism in India thus appears as a process to which both the Western and Indian traditions of medicine have contributed. This mutual interaction probably resulted in increasing the degree of professionalization, systemic articulation and even politicization of the Indian medical traditions. The various systems have also "modernized" in the sense of adopting, to varying degrees, the modern technological artifacts and processes in

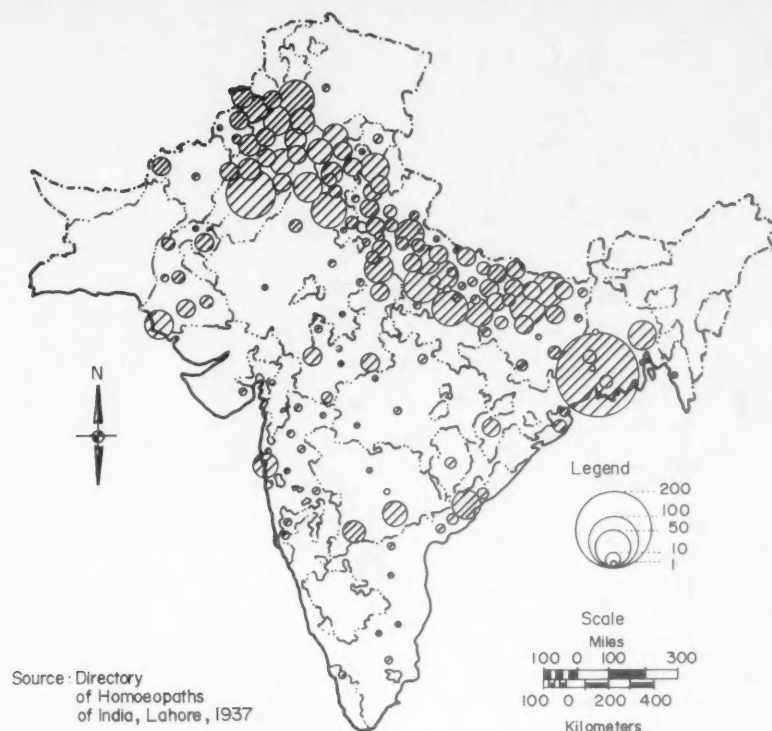


Fig. 1. "Doctors", homoeopaths and "laymen", India 1937.

the laboratory, for production, distribution, diagnosis, and other related purposes while at the same time maintaining significant philosophical differences. Leslie's argument in this respect is appealing, in that professionalization and articulation of the positions of indigenous systems does not have to be understood as a purely nationalistic expression [19].

If I understand Leslie's broader arguments correctly, it seems that medical pluralism in India has been accentuated as a result of what he calls the "reciprocal relationship" between cosmopolitan medicine and the two major indigenous healing arts—ayurveda and unani [20]. The articulation and professionalization of the indigenous Indian systems has helped to draw attention toward the philosophical as well as the behavioral and spatial dimensions of medical pluralism. It is within this broad context that homoeopathy is of interest to me. The 'official' Western medicine profession in India, throughout the colonial period opposed and disowned homoeopathy, but the fact of its being part of the Western medicine milieu had been imprinted on the minds of the adopters of homoeopathy.

#### THE SPATIAL ASPECT OF HOMOEOPATHY IN INDIA

The spatial distribution of homoeopathic practitioners in India has been mapped for 1937, 1961 and 1963–64 (Figs 1, 2 and 3). It has not been possible to use the current register due to its incompleteness. The data are subject to some errors, because there has not

been (until recently) any clear standard qualification or criteria for identifying a homoeopathic practitioner. The 1949 Report of Indian Government's Homoeopathic Enquiry Committee stated: "Excepting the State Faculty of Homoeopathic Medicine of West Bengal there is no other recognized organization which maintains a list of homoeopathic practitioners" [21]. The 1961 data are taken from the Institute of Applied Manpower Research [22]. These data are in turn extracted from the 1961 Census of India, and whereas these are the most detailed data available, they suffer from the limitations inherent in the census operations. The 1963–64 data showing the relative distribution of different types of physicians are taken from a rather unlikely source—*A Compendium of Basic Facts* regarding agricultural labor [23]. These data are based on national sample surveys but relate only to the rural areas. The practitioners of "allopathy" (Western System) only have been further subdivided into three categories. The "graduates" are those who hold at least the Baccalaureate degree in medicine and surgery (MBBS) from medical colleges. The "licentiates" on the other hand, are the diploma holders from medical schools. The "others" are simply allopathic practitioners without any official qualifications in the allopathic system.

The only pre-Independence detailed data source available to me was the Masood directory [24], published in Lahore in the late 30's. Masood made an effort to classify his respondents numbering about 3000 into "doctors" of homoeopathy, "homoeopaths", and "laymen" depending upon whether they claimed



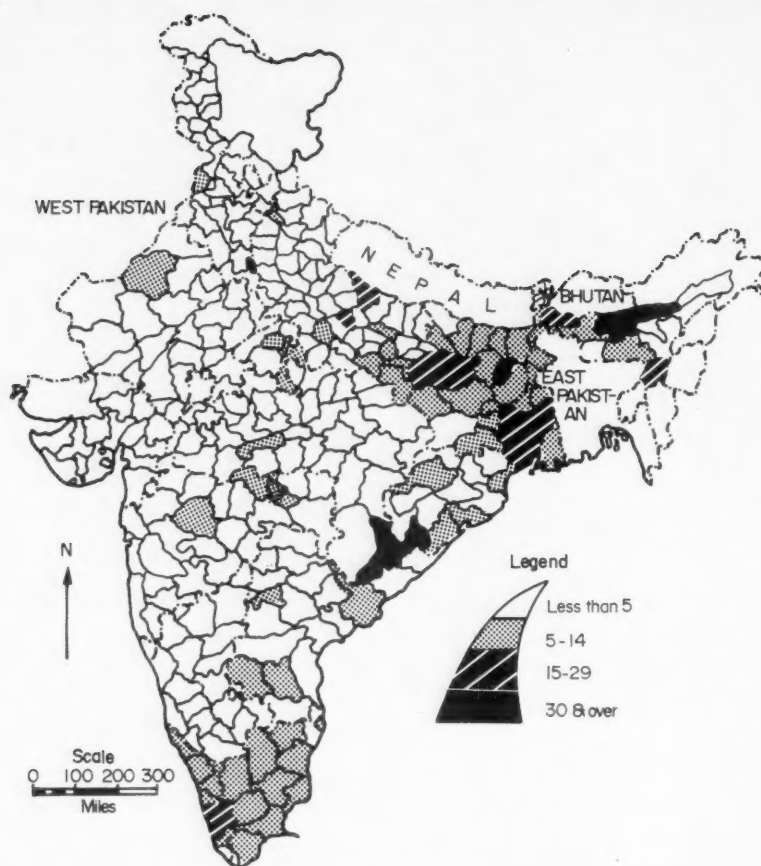


Fig. 2. Homoeopathic physicians per 100,000 persons, 1961.

some degree or certificate, had some experience, or used homoeopathic remedies for their domestic ailments. This categorization was essentially based on the statements of the responding individuals rather than a scrutiny of qualifications. In any case, the very meaning of "qualifications" was in doubt because of the existence of homoeopathic "diploma mills". Another fact that must be borne in mind is that directories of this type are rarely complete and there is generally a tendency for limited response from distant places outside the advertising capabilities of the editor. This leads to overemphasis on areas where professional and communication contacts are well established. Clearly, urban areas will be emphasized through this method.

Considering the above facts, the map based on this directory (Fig. 1) shows the main concentration of homoeopathic practitioners in the Indo-Gangetic plain from Bengal in the east, to Punjab and further to Sind in the West. Elsewhere, (and partly due to uneven response) the homoeopathic practitioners had spotty concentrations such as in the Godavari Delta region, Hyderabad City, Bombay City, Bhopal, and part of Chhattisgarh Plain. Perhaps, a list of homoeopaths compiled by some source in South India during the 30's would have shown a different distribution. There is, however, little doubt that several large cities

of the Indo-Gangetic plain had (as indeed at present) many homoeopathic physicians, but especially Calcutta.

The 1961 Census data on homoeopathic physicians (Fig. 2), converted to physician-population ratio (physicians per 100,000 people), showed very clearly that homoeopathy's primary concentration was from Eastern U.P. through Bihar, Bengal, Assam, and Orissa. Kerala and Tamil Nadu formed another, but less intense, area of homoeopathy's practitioners. The City of Delhi stood out as the only major western concentration of this medicine system. The concentration in Delhi is probably due to two main reasons. First, many physicians uprooted from Western Punjab, tended to settle in Delhi following independence. Second, as Delhi grew as the seat of central government, it has attracted people from different regions of India, including some homoeopathic physicians. Throughout the rest of India homoeopathy had limited distribution as indicated by the census data.

Distribution of medical practitioners by their "type" has been shown in Fig. 3 for the rural areas, and by the state as the data unit. These data of the National Sample Survey even though highly aggregated and also limited to rural areas bring out some important points. Almost 18% of all rural medical practitioners in India were homoeopaths. Their distri-

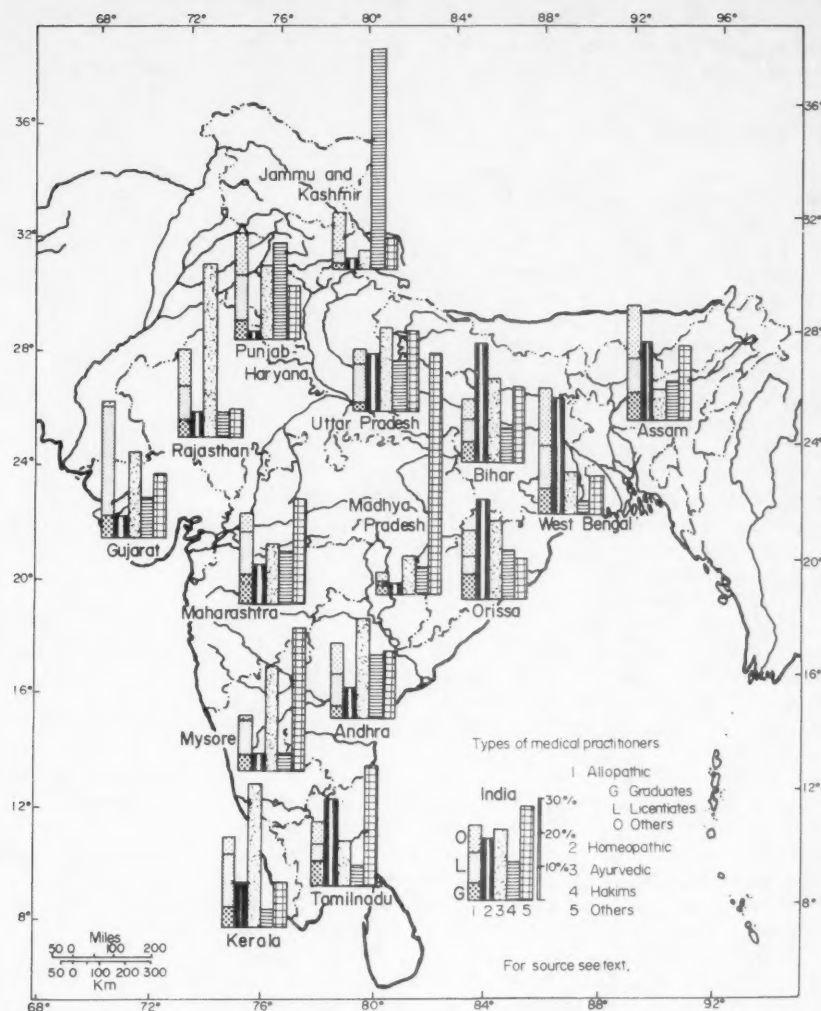


Fig. 3. Types of medical practitioners by State (rural areas) 1963-1964.

bution however, was far from even. In Assam, Bihar, Madras and West Bengal their proportion was substantially above the average for India. However, their proportion was greatly below the average in Jammu and Kashmir, Punjab plus Haryana, Madhya Pradesh, Gujarat, and Mysore. My own field work in the Punjab has indicated that rural people there rarely seek medical help from homoeopathic practitioners [25]. Notice (Fig. 3) that in rural Punjab and Haryana only 2% of the rural medical practitioners were homoeopaths compared to almost 35% in West Bengal. What is brought out clearly by the spatial distributions of medical practitioners is that whereas medical pluralism exists in all parts of India, the constituents of that pluralism vary rather widely. In Kashmir for example, unani system dominates, whereas in Madhya Pradesh the class "others" overshadows the rest. These "others" are of course practitioners of neither Western medicine, nor homoeopathy, ayurveda, or unani.

The regional/spatial variation described above rarely finds place in discussions on medical pluralism.

Considering the several regional configurations of medical pluralism it seems that its spatial dimension needs more attention. Parenthetically, I do not wish to imply that the various indigenous medical practitioners are purists, for there is sufficient evidence to the contrary [26]. Nevertheless, if we recognize the several varieties of pluralism in different parts of India, we might become more aware of the relative importance of homoeopathic and indigenous physician's constituencies as well as the behavioral response of health seekers. The geographic distribution of the variety of physicians shown in Fig. 3 when compared with the Leslie model of *Pluralistic South Asian Medical System* would suggest the possibility of several distinctive regional variants of the model. The spatial examination leads us to focus on the substantial rural strength of homoeopathy in Eastern India and Tamil Nadu, the similar prominence of ayurveda in Rajasthan, Andhra and Kerala, the substantial importance of non-formal (i.e. "other") systems of cure and the minor distribution of homoeopathy in Madhya Pradesh, Maharashtra and Mysore (Karnataka).

Research is certainly needed to understand the determinants of regionally prominent medicine systems.

#### HOMOEOPATHY'S ROLE IN PLURALISM

The medical milieu of India at the beginning of the nineteenth century was pluralized as a result of the accelerated entry of Western medicine and surgery and their interaction with medicine systems present in India. Western medicine itself, as indicated earlier, was no single unit composed as it was of some mutually antagonistic streams—e.g. allopathy, and homoeopathy, apart from some fragmental systems of healing such as mesmerism [27].

I have discussed elsewhere the coming of homoeopathy to India in the Nineteenth Century, and the "naturalization" process which it underwent then in the Indian milieu [28]. It was observed that the physicians of Bengal played a crucial role in its early naturalization in India, which seemed to have manifested in two concurrent processes. First, the Bengali physicians made serious efforts to harmonize the fundamental principles of homoeopathy with that of Hinduism, thus generating broad cultural receptivity for this medicine system of European origin. Second, many Bengali physicians adopted this system within Bengal and propagated it outside of Bengal. Thus, its early expansion was not dependent on the efforts of an alien power, but rather on the efforts of the Indian people themselves—albeit originating in Bengal and already relatively modern in outlook.

Homoeopathic literature of the 19th and present century bears witness to the role of Bengali homoeopaths in this process. These Bengali physicians were not "missionaries" nor employed as physicians by the British government, but seem to have been part of a much larger process set in motion soon after the British assumed direct control of India, following the Indian Revolt of 1857. This process involved, in part, the inter-regional migrations of certain small but highly significant communities that were to play their role in the socio-economic, political, and bureaucratic manifestation of the British Raj. The educated Bengalis formed one such migrant community. The broader dynamics of this process have been well articulated by Broomfield [29].

A few specific examples might be cited to illustrate the role of Bengali physicians: The *Homoeopathic World of Britain* (Aug. 2, 1869) reported the opening of a homoeopathic hospital at Benares by a Bengali gentleman on Sept. 25, 1867; two Bengali gentlemen, C. C. Ghosh and S. B. Mukerjee established a journal, *The Indian Homoeopathician* at Lucknow in 1899; In 1900, Dr D. S. Kaistha, a Bengali, established his homoeopathic practice at Amritsar; Dr Masood of Lahore, the compiler of the only major pre-Independence homoeopathic directory, claimed that he learned homoeopathy from a Bengali doctor who practiced at Wazirabad (now in Pakistan).

Kenneth Jones has documented the role of Bengalis in Punjab during the 1860's and 70's [30]. Even though Bengalis were very small in numbers, they were then the most westernized Indian group in Punjab. Homoeopathy, coming with the Bengali physicians must have appeared a modern system of medi-

Table 1. Doctor-population ratio: India, 1961

State/Union territories	Doctors per million people	
	All doctors	Homoeopathic Doctors
Andhra Pradesh	734	36
Assam	613	172
Bihar	476	119
Gujarat	404	13
Jammu and Kashmr	296	6
Kerala	1036	111
Madhya Pradesh	293	18
Madras	530	82
Maharashtra	527	31
Mysore	385	15
Orissa	332	76
Punjab	907	20
Rajasthan	335	9
Uttar Pradesh	394	46
West Bengal	891	155
Delhi	3021*	156*
Other territories	783*	71*
All India	533	63

Source: Institute of Applied Manpower Research. *Stock of Doctors of Non-Allopathic Systems of Medicine*. IAMR, New Delhi, 1967.

\* Calculated by writer.

cine with the added advantage of it being "Indianized". The distribution of homoeopathic physicians and particularly their relative strength in the Ganges Plain and Eastern India in general is clearly linked with Bengali migration. Since most such migrations had urban focus, homoeopathy has tended to have an urban rather than a rural orientation.

Throughout the history of homoeopathy in India, it had to face incessant criticism from the "Official" allopathic system due to the alleged unscientific principles on which homoeopathy was based [31]. Governmental support for homoeopathy until recently has been also minimal because of the official dominance of the medical structure by Western medicine. It, therefore, appears rather remarkable that homoeopathy is as widely distributed in India as it is (Table 1). After all, the proportion of homoeopaths in 1961 was higher than the doctors of allopathy in the rural areas of Bihar, Madhya Pradesh, Maharashtra, Andhra, Mysore, Tamil Nadu and Kerala (Fig. 3).

It seems to us that homoeopathy was able to add a new dimension to Indian medical scene through seeking some concord with Indian, particularly Hindu, beliefs [32]. It was, moreover, rarely presented as a culturally superior and domineering medicine system in spite of its European origin. From the viewpoint of many Indians, Homoeopathy was Western and modern without being colonial. That cognition was virtually the antithesis of "allopathy" which marched into India as a representative of the West with its scientific air as well as its colonial regalia.

For the homoeopathic practitioners, the drive to survive under official government criticism was probably fortified by the ability and opportunity to make a living by practicing homoeopathy after getting only a moderate education, since demand for healers has

never been fully met in India. Criticism from official medicine seems to have been met by several homoeopaths through greater and greater articulation of faith in the homoeopathic law of cure—*similia similibus curantur*. Homoeopaths have also argued that vaccines and allergy treatments are in reality homoeopathic and clearly support the basic homoeopathic "law of similars" and the important principle of small doses [33]. Such efforts have been made to discount the attacks of those who consider homoeopathy as a non-scientific cult. In addition to these efforts, the behavioral responses of homoeopathic profession have included political and parapolitical actions for the Governmental recognition of homoeopathy, adoption of several technological innovations as in the manufacturing of homoeopathic injections, and setting uniform curricular standards for homoeopathic institutions of late.

In spite of these changes, there is no indication that there is any significant modification in the basic homoeopathic philosophy. Up to the present homoeopathy has been successful in sharpening its differences from allopathy and increasingly also from ayurveda and unani as the degree of professionalization in the latter two systems increases. It is therefore not a mere chance that whereas up to the sixties homoeopathy used to be categorized by the Government of India loosely with indigenous systems, but since 1974 a separate Central Council of Homoeopathy has been established. Thus, philosophically and legislatively, homoeopathy has helped to intensify medical pluralism.

Another way in which homoeopathy has contributed to medical pluralism in India is at the personal level of the physician and of the health seeker. Many patients as well as indigenous physicians, at the functional level, as contrasted with the philosophical level, are not wedded to a single system of medicine. In fact, as Carl Taylor has rightly observed, the indigenous physicians are not necessarily practitioners of indigenous medicine [34]. The extent of such practice is not precisely known, but it is too widespread to be ignored. Homoeopathic medicine may be prescribed by indigenous physicians who normally are associated with ayurveda or unani. Certainly, there are homoeopaths who prescribe, overtly or covertly, other types of medicines. Similarly, many so called allopathic practitioners may actually dispense patented ayurvedic, unani or even homoeopathic medicines. At the level of the individual health seeker too, medical pluralism seems to be widespread. A decade ago T. N. Madan found that a majority of households in his study of an urban area combined different systems of medicine [35]. My observation in a rural area of Punjab was that over a third of the households preferred to keep their options open for a variety of medical systems [36]. Whether or not homoeopathic treatment is eventually undertaken, at least this option exists for the patient. The exercise of this option by individual health seekers in favor of homoeopathy is more likely to occur in the urban than in the rural areas due to the greater urban gravitation of homoeopathic practitioners. Thus, what appears on the surface as medical pluralism with respect to coexisting systems of medicine only seems on scrutiny to be pluralism at the individual physician and patient level

also. This last point suggests that more serious attention needs to be directed toward the behavioral dimensions of both physicians and health seekers.

#### ENVOI

This paper has tried to briefly draw attention toward a relatively neglected systemic component of medical pluralism in India—homoeopathy. Homoeopathy, an Eighteenth Century system of German origin has added more or less a distinctive dimension to the pluralistic Indian medicine milieu. In most other countries of the world homoeopathy either became reduced to a medical heresy or a cult after the cosmopolitan medicine absorbed what it could from it. In India, on the contrary, homoeopathy has the unique distinction of achieving "officially" the recognition which in Western countries it never attained. This recognition seems to be the culmination of a process of "naturalization" which homoeopathy underwent in India after its introduction to Bengal in the Nineteenth Century. Bengali physicians played the most significant part in the early phases of this process by harmonizing homoeopathic principles with that of Indian culture, and by propagating this system of medicine in India. In spite of the official opposition to this system, its spread was helped by it being Western and modern without being a colonial imposition.

A brief examination of the spatial distribution of homoeopathy brings out the areas of its regional concentration, as well as sparsity, partly stressing the region of its early introduction and spread. The spatial analysis also points out the regionally varied relationship existing between homoeopathy and other major medicine systems in India. This seems to have some relevance to Leslie's general model of a pluralistic South Asian medical system, by suggesting the possibility of its several regional variants in India.

It has been noted that medical pluralism exists not only at the systemic level but also at the level of the individual physician and the health seeker. In the latter cases homoeopathy enters the individual decision process along with other systems of medicine. In this respect homoeopathy has a unique position in India, especially in the urban areas.

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#### REFERENCES

1. Jones W. T. World views and Asian medical systems. In *Asian Medical Systems* (Edited by Leslie C.), p. 403. Univ. California Press, Berkeley, CA 1976.
2. Beals A. R. Strategies of resort to curers in South India. In *Asian Medical Systems* (Edited by Leslie C.), p. 198. Univ. California Press, Berkeley, CA 1976.



3. DHEW. *Osteopathic Physicians in the United States*. U.S. Dept. of Health, Education and Welfare. DHEW Publication No. HRA 75-60, 1975. This report shows that little distinction now exists between the M.D.'s and D.O.'s with respect to their medical training. The admission requirements are also similar (p. vii). Additionally there has been a steady decline in the practice of "manipulative therapy" by the graduates of osteopathic colleges since the 1930's. For example, 29.6% of the pre-1930 graduates practiced manipulative therapy. Only 2.1% of the graduates of 1950-59 era practiced this therapy, the corresponding figure for the 1960-69 graduates is a mere 0.3%.
4. Johnson A. C. *Chiropractic Drugless Therapeutics*, p. xi, 4th edn. Johnson, Palm Springs, CA, 1965.
5. Lewis O. *Village Life in Northern India*, pp. 261-301. Random House, New York, 1958.
6. Furnivall J. S. *Netherlands India: A Study of Plural Society*. Cambridge Univ. Press, 1939.
7. India. Government of India. *Report of the Committee on Indigenous Systems of Medicine*. Government of India Ministry of Health, Delhi, 1948. This committee is also called the "Chopra Committee".
8. Leslie C. The professionalizing ideology of medical revivalism. In *Entrepreneurship and Modernization of Occupational Cultures in South Asia* (Edited by Singer M.), pp. 216-242. Duke Univ. Press, Durham, NC, 1973.
9. Brass P. The politics of ayurvedic education: a case study of revivalism and modernization in India. In *Education and Politics in India* (Edited by Rudolph S. H. and Rudolph L. I.), pp. 342-371. Harvard Univ. Press, Cambridge, MA 1972.
10. See [7].
11. Sidel V. W. and Sidel R. The delivery of medical care in China. *Scient. Am.* **230**, 19, 1974.
12. Maru R. Health manpower strategies for rural health services; India and China: 1949-1975. *Econ. polit. Weekly Special Number*, 1253-1268, August, 1976.
13. Abelson H. A view of health research and care. *Science*, N.Y. **200**, 845, 1978.
14. Engel L. The need for a new medical model. *Science*, N.Y. **196**, 129-136, 1977.
15. See for example Good C. M. Traditional medicine: and agenda for Medical Geography. *Soc. Sci. Med.* **11**, 705, 1977.
16. Kaufman M. Homeopathy in America. In *The Rise and Fall of a Medical Heresy*. Johns Hopkins Press, Baltimore, MD, 1971. Many details of controversy about Homeopathy are discussed in Chapter III.
17. An interesting work on hydropathy is Hunter A. *Hydropathy: Its Principles and Practice*. John Menzies, Edinburgh, 1878.
18. Basham A. L. The practice of medicine in ancient and medieval India. In *Asian Medical Systems* (Edited by Leslie C.), p. 40. Univ. California Press, Berkeley, CA 1976.
19. See [8].
20. Leslie C. The ambiguities of medical revivalism in India. In *Asian Medical Systems* (Edited by Leslie C.), pp. 356-367. Univ. California Press, Berkeley, MA, 1976. Note especially the "Model of a Pluralistic South Asian Medical System" on p. 361.
21. India. Government of India. *Report of the Homoeopathic Enquiry Committee*, p. 34 (also called the Mukherjee Committee). Manager of Publications, Delhi, 1949.
22. Institute of Applied Manpower Research. *Stock of Doctors of Non-Allopathic Systems of Medicine*. IAMR, New Delhi, 1967.
23. India. Government of India. *Agricultural Labour in India, A Compendium of Basic Facts*. Department of Labour and Employment, Government of India, 1967. Table 13.3 (pp. 212-213) gives the percentage distribution of rural resident medical practitioners of different systems by state.
24. *Masood Directory of Homoeopaths of India*. Mohammad Masood, Lahore, 1937-38.
25. Bhardwaj S. M. Attitude toward different systems of medicine: a survey of four villages in the Punjab-India. *Soc. Sci. Med.* **9**, 603, 1975.
26. Taylor C. E. The Place of indigenous medical practitioners in the modernization of health services. In *Asian Medical Systems* (Edited by Leslie C.), p. 287. Univ. California Press, Berkeley, CA, 1976.
27. Mesmeric Hospital. *Record of Cases Treated in the Mesmeric Hospital From November 1846 to May 1847; With Report of the Official Visitors*. Ridsdale, Military Orphan Press, Calcutta, 1847.
28. Bhardwaj S. M. Early phases of homoeopathy in India, *Asian Profile* **1**, 281, 1973.
29. Broomfield J. H. *Elite Conflict in a Plural Society: Twentieth Century Bengal*. Univ. California Press, Berkeley, CA, 1968.
30. Jones K. The Bengali elite in post-annexation Punjab. *Indian Econ. soc. History Rev.* **3**, 375, 1966.
31. For example, *The Indian Medical Gazette*, through its editorial "Homoeopathy in the University of Calcutta," exhorted the medical profession to oppose homoeopathy (June 1, pp. 158-160, 1978).
32. This point has been discussed at some length in Bhardwaj [28] above.
33. These arguments were made clear to the author by Dr Diwan Harish Chand, Honorary Physician to the President of India, during discussions with him in Summer, 1979. Also see: Chand D. H. *History of Medicine and the Contribution of Hahnemann*. Paper presented at Jubilee Congress of International Homoeopathic Medical League, Rotterdam. National Homoeopathic Pharmacy New Delhi, 1975.
34. See [26].
35. Madan T. N. Who chooses modern medicine and why. *Econ. polit. Weekly* **4**, 1475, 1969.
36. See [25].

## MEDICAL PLURALISM AND HEALTH SERVICES IN INDIA

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**Abstract**—The problem of the equitable distribution of health services has gained universal recognition. In the developing countries, studies have indicated an uneven distribution of medical and health services, and various people have offered alternate approaches, strategies, and programmes to rectify this imbalance. Based on these reports, programmes have been launched in India, but unwarranted assumptions and biases underlie generalizations in this literature about the Indian medical situation. For example, the system of modern medicine has been characterized as elitist, urban-oriented, curative, hospital-based and so forth; and therefore, by implication, unsuited to Indian conditions. The result is a simplistic picture which has obfuscated clear thinking.

The problem has multiple dimensions, making it imperative for the sociologist to disentangle the issues. One has to clarify the meaning of medical pluralism in India, and separate its various components. There is need to separate the political from the economic dimensions of health and medical problems, and to isolate the purely medical from the non-medical interventions in health care. One has also to analyze the community's response to medical pluralism.

### I

The pluralistic character of health and medical systems in almost every society, be it simple, or complex is being increasingly recognized. This pluralism may receive State recognition and patronage, or the State may discourage it or remain neutral to its existence. In India the relationship between medical pluralism and the State poses interesting questions. One of the most important issues is the relationship between the State, the modern and other systems of medicine, especially in the context of health services.

Medical pluralism can be understood to mean two things: it may mean the co-existence of multiple systems of medicine, including what are called folk systems, popular systems, traditional professionalized systems which present multiple choices to individuals, and it may mean pluralism within a particular system. An individual has not only a choice between consulting an Ayurvedic practitioner or one practicing modern medicine, but within modern medicine, he has a choice to go to a hospital (of a particular type), or to a doctor in private practice, or a government dispensary, or a doctor practicing in a village, or a town, in a nearby or a distant city. Then there is pluralism in the types of personnel who contribute to the practice of modern medicine. Apart from specialists and generalists, 'doctors' in India, may be distinguished between those holding the M.B.B.S. degrees, the Licentiates, and the R.M.P.s "registered medical practitioners" without any qualifications. Then there are other personnel, including nurses, technicians, dispensers and others who not only aid the doctors in their tasks but who may independently assume curative functions. For example, many a pharmacist takes to advising medications for various symptoms.

Extending the meaning of pluralism further, one may notice pluralism in people's conceptions of disease and illness, their resort to medical practices belonging to different systems, and in their responses

to other medical dimensions. The layman's perspective on medicine has components from various systems of medicine.

To this extended meaning of pluralism, one could add the pluralism among the medical practitioners themselves. There is considerable evidence that the general practitioner draws from varied systems in his medical practice. For example, a traditional practitioner may incorporate the stethoscope, ophthalmoscope and other instruments and drugs from modern medicine into his kit, and germ and virus theories in his explanatory armoury. Similarly, practitioners of modern medicine may explain dietary restrictions in terms of the hot-cold dichotomy of Ayurveda.

The state funded health services in India are also pluralistic in character. There is not one health service in the country, nor is there uniformity among various health services. To name only a few, there are the Central and State Health Services, the Central Government Health Scheme, the Railway Medical Service, the Army Medical Corps, the E.S.I., the Rural Health Scheme, and numerous others. Within the city of Delhi itself, there may be 20 or more agencies, government, private, missionary, philanthropic, providing medical care.

The impact of multiple systems of medicine on health services remains an area little understood in India. It has received scant attention in India from social scientists, medical men, administrators, and policy makers. What one finds is a plethora of assumptions, presuppositions and generalizations having little or no relation to the real complexities of the situation. The presuppositions about the institutions in which modern medicine is taught and practiced, and about the professionals who are trained in them, their orientations, social backgrounds and motivations are important, as are those about the manner in which traditional systems have interacted with modern medicine, and the people's responses to medical pluralism. The overall result has been that a distorted and simplistic picture of the medical scene

has obfuscated clear thinking on programmes to improve the health status of the community. Clearly, the problem has multiple sociological dimensions that the sociologist should disentangle. I shall critically review various assumptions about medical pluralism to show what implications they have for health services in the country.

I would follow those scholars who separate those aspects of health which pertain directly to medical interventions, and those which pertain to non-medical interventions. Deliberate actions to perform specifically medical tasks, such as curative and preventive tasks, medical treatment and care, and immunization programmes constitute medical interventions. Also involved here are the resources specifically marked for the purpose. On the other hand, the deliberate and non-deliberate activities and utilization of resources which affect people's health indirectly such as the provision of safe drinking water, the enforcement of laws against food adulteration, or the maintenance of nutritional programmes, good roads and transportation services constitute non-medical interventions in health and involve non-medical personnel. They should be separated from the medical interventions, and in the "health service" resources should be separately allocated for them.

## II

A great deal has been said and written about the disparities in the distribution of medical facilities in Indian society, more particularly between the rural and urban sectors. Much ink has been spilled repeating that 80% of the population lives in rural areas and 20% in the urban areas, and that the distribution of doctors, is in the reverse order. Therefore, it is concluded, urban areas and the "elite" are far better served than rural areas and "underprivileged" people. However, these figures are about the distribution of doctors trained in modern medicine, and not about medical men in general. If one were to consider the figures on traditional and other practitioners of various sorts, one would see that, after all, rural areas are not so badly provided for, at least as far as the number of persons engaged in some sort of medical practice is concerned.

It is important to know the distribution of doctors and all other practitioners in urban and rural areas. Survey research is needed in big cities, small towns and villages. Within big cities, various localities need to be compared to identify the "privileged" as well as the "neglected" areas. Thus, in Delhi itself, there is no equitable distribution of various types of medical men in different localities. One finds that doctors concentrate in certain areas, and so do the traditional practitioners.

In addition to eliciting the distribution of medical men in different areas, we need to ascertain the socioeconomic and other characteristics of these localities. What factors lead practitioners to settle in certain areas and not in others? In India, doctors in modern medicine are taken to task for their concentration in urban areas. The doctors' "self-interest" in making "profits" and their "love of city comforts" are said to explain this state of affairs. However, a slight probing into this matter will show that in India medical aid

falls largely on private enterprise, and the practitioner is more likely to be guided by forces of the market situation, like any other entrepreneur, than by a "noble disregard for monetary gains" and "humanitarian" considerations for the "poor" and the "rural folk". What is true of the distribution of doctors in private practice is also true about the spread of other institutions in which medicine in all its variety is practised. The Government plays a significant role in the "mal-distribution" of medicare in different segments of the community. In the capital city itself the government concentrates medical facilities in certain areas to the neglect of other more underprivileged and deserving areas. This is true of other cities as well.

For sociologically meaningful statistics on the distribution of medical resources and man-power, it is not enough to know only how many men are available per thousand population, as done in almost all official statistics. Rather, one would like to know in what capacities and in which types of institutional complexes are medical men available. The point I wish to highlight is that for any understanding of medical pluralism the first pre-requisite is proper statistics about the distribution of various medical resources and man power. Statistics of this type have to be seen in relation to the epidemiological profile of a given community. Moreover, the location of a hospital or doctor in a village or town does not limit the clientele to that locality. People in a rural area near a city hospital may make good use of it. The general hospitals in Delhi cater to a large rural population in the neighbouring villages, and departments like the neuro-surgical and cardiology departments may cater to distant villages as well.

## III

The distribution of health facilities and resources and the problem of their comparative utilization takes us into the realm of people's choices and preferences between various medical systems. It is often assumed that when making a choice, people are fully aware of the underlying ideologies of these systems, i.e. that they make a conscious choice based on substantial knowledge about the distinguishing and distinctive characteristics of the various systems. However, a closer view reveals different levels of information ranging from full knowledge about one or more systems to very superficial if not distorted notions about all or most medical systems. People's knowledge about medicine and health is actually a total of fragments of beliefs and practices found in diverse systems.

It is not unusual to find that people understand a remedy in one system in terms of the cognitive categories of another system. It is this sort of plurality which, as a matter of fact, enables a person not only to switch easily from one medical system to another but also to experiment with new therapies in his search for an effective cure. The issue here is: given the multiplicity and plurality in beliefs and practices, and limited familiarity with different systems, how do people make choices in particular illness episodes? Are these choices consistent over a period of time? Do people evaluate various systems by a treatment outcome, or by the social characteristics of the practi-

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tioners, or by the social relationships between patients and practitioners? One should question the assumption so often made that people clearly prefer traditional medicine because it is their own or they feel at home in it, and that they reject modern medicine because it is alien to their way of thinking and is presented to them by doctors who are socially and culturally aloof from them. My own observation is that these are not at all the common bases of choices. The real bases are the availability, accessibility and quality of medical care provided by the diverse systems, and people's past experiences in particular disease episodes. Quite often the "choice" is also influenced by the relative position held by the sick person *vis-à-vis* the decision maker. For instance, the choice may be different for a female relative or a servant in similar illness episodes.

It is of utmost importance to first know within a given area, the nature and types of medical facilities in their totality, including the personnel, drugs, and equipment available to different segments of the community, before talking about how people's choices and preferences affect utilization in the long run. It is not simply a question of how people classify various illnesses and diseases on the one hand, and practitioners on the other, and how they match the two in particular diseases episodes. It is more a question of assessment and evaluation of the facilities available and accessible to them. Before attributing a pattern of choices to established preferences, people's realistic assessment of available facilities has to be gauged.

Health facilities may be underutilized due to economic costs, distance and transportation, family displacement, lack of awareness, and other inconveniences. On the other hand these services may be over-utilized. Heavy use may dilute the standard of care and create low morale among the personnel, and dissatisfaction among the recipients. The general hospital in India is a typical example of over-utilization. Allocation of resources for personnel, medications, equipment, instruments, linen, and so on is made according to the official number of hospitals beds. But as a matter of fact, the hospital may have a large number of indoor patients who share beds or get what is called a "floor bed". The over-crowding in hospitals, the inconveniences caused by the limited supply of basic amenities, and the diluted quality of medical care has earned the Indian general hospitals the reputation of being "inhuman places". It has become fashionable to locate the cause of "dehumanising hospitals" in the "Western model" on which Indian hospitals are said to be organized. Anyone who has witnessed the hospital scene in India from close quarters, would testify that as a matter of fact, the average Indian general hospital is very unlike the "Western hospital" in the quantity and quality of equipment provided to the staff, and in the facilities offered to the patients. Indeed, an important reason for the 'dehumanizing' experience of patients in the general hospital is the nature of the hospital organization, especially, the poorly coordinated, unsympathetic administrative rules. A visit to the hospital for the average patient involves being shunted from one department to another, in being made to wait uncomfortably in long queues for medical investigations and then to be told to come on different days for the

various reports. The patient feels lost in the big complex. Also, hospital rules pose endless problems for the patient and his relatives in their interaction with the treating staff.

Medical care rests on the assumption that all the needs of the patients are to be met by the hospital staff, especially the nursing and other paramedical staff. Consequently, hospital rules are designed in a way that treat relatives only as well-wishers and occasional visitors. A certain number of hours in a day are fixed for the purpose of visiting patients and entry of visitors outside the visiting hours is restricted. However, because of the severe shortage of the nursing and other staff and the heavy demands on the staff that is available, the patients' relatives are in fact expected to contribute significantly to patient care. Moreover, relatives are explicitly expected to participate in decision making on behalf of the patient in such issues as permission for surgical operations and procurement of blood for transfusion. But the organization fails to take official cognizance of this involvement of relatives. Rather than helping relatives contribute effectively to patient care, the organization confronts them with numerous obstacles and inconveniences. At a children's hospital in Delhi, only the mother or a female attendant is allowed to stay with the child in the wards. The assumption is that such a person is best suited to look after the sick child. This often creates a crisis for the family, the mother may not be free from other duties, other female attendants may not be arranged for, or the child may be very attached to the father and may want him to be near him. This is apart from the problem that the mother may not be accustomed to staying outside the home independently.

No doubt there are factors endogenous to the hospital organization as well as external to it which lead to public dissatisfaction with hospitals. This has often been seen as indicative of the unsuitability of the institution of the hospital for providing medical care in India. What is often forgotten here is that over-utilization, while contributing to problems in general hospitals, also indicates that the hospital has come to stay in the Indian context and provides a convenient setting for medical care. It is therefore sociologically naive to wish the general hospital out of existence before identifying the real causes of its problems and the people's attitudes to it.

Utilization behaviour varies with different components of the health service. For instance for maternity care in a given community there may be a heavy demand on the services of the obstetrician, yet the maternity beds may go under-utilised because people prefer deliveries at home. It follows that one could not measure maternity service in the community by the number of maternity beds available, and hope to improve service by increasing the ratio of maternity beds to the population. Rather, changes may be effectively brought about by increasing the number of obstetricians and providing them facilities to visit patients in their homes.

#### IV

The laymen's response to problems of health and disease has components from varied systems of medi-



cine. This plurality enables him to switch from one type of practitioner to another in search of the best means to tackle a problem. The layman incorporates elements from modern medicine in health care without being familiar with the theoretical principles on which this system is based. Medical practitioners also incorporate elements from other systems without being conversant with the theoretical principles underlying these systems. In the case of the medical practitioner such an incorporation may have serious implications for the patients' health. Traditional practitioners are making increasing use of drugs, instruments, ideas and explanations from modern medicine. Indeed, various studies show that modern medicine has come under heavy abuse by these practitioners. Taylor, for example, observed in the Punjab area that "... the greatest source of hazard is the tendency of ... pseudo-indigenous practitioners to use the most powerful drugs possible in order to get quick results. For example, one of the most commonly used drugs is chloramphenicol, with no realization of its toxicity" [1]. Taylor mentions the case of a young man with basic pharmacy training who had started a shop in the village and had built a "lucrative clinical practice using more powerful western drugs than we dare use in our rural practice" [2]. In my own research, I have observed many a patient visiting the general hospital to obtain a "free diagnosis" from the practitioners of modern medicine. The diagnosis is then told to the local "practitioner" at home, who simply matches a medication with the diagnosis on the basis of information derived from reading pharmaceutical literature or from talking to local pharmacists. The indigenous practitioner, in this manner incorporates drugs from modern medicine and uses them indiscriminately on the gullible layman. Usually he impresses the patient with their origin in modern medicine, but such practitioners are also said to administer powerful chemical preparations under the guise of traditional medicine. The layman is easily taken in, because in his thinking, while traditional remedies may not do any good, they at least do not cause any harm, and may be tried therefore without risk. Of course, catastrophic complications may result from this injudicious use of modern drugs. The functionalists among the sociologists may praise the incorporation of items from modern medicine in the practice of traditional cures as manifestation of the "adaptability" of traditional medicine. The cynic will see it as exploitation of the ignorant for which the poor patient pays a heavy price. The fact is that efficacy is increasingly becoming the criterion for evaluating practitioners, and traditional medicine is losing ground to the more efficacious modern medicine. The persons most qualified to testify to this from their own experiences are the traditional practitioners. But they fail to acknowledge this openly because their survival depends upon functioning under the label of indigenous medicine. It may be argued, if the layman has to get modern drugs in any case, why not have them given by a qualified person rather than by a quack in the guise of a traditional practitioner?

By their promises of "guaranteed cure" without hospitalization and surgical operation, many an indigenous practitioner has misled the layman and delayed him from seeking timely medical aid. Many a patient

has reached the hospital only after the disease has advanced to an irreversible stage after trying various "indigenous remedies". Or, having been advised surgical treatment or told about a prolonged treatment or bad prognosis by the doctor, very often the patient has left the hospital in search of some alternative "safe" or "quick" but surely not inexpensive, remedy. Such observations may lead one to raise the political and ethical question of the desirability of leaving the "choice" of medicine in any disease episode to the layman, given his low level of medical information and his gullibility. I shall leave this moot point here.

# V

Another assumption about the medical system of India needs to be analyzed carefully. The argument that the health service should be shaped in response to people's needs, and that care should be given to the people in the manner in which they want it, is often advanced to bring out the limitations of modern medicine. The failure of modern medicine is seen to lie in the doctor's failure to appreciate what the people themselves see as their needs and in the alienation of this "Western system" from the people's cognitive categories. The people are said to prefer their own indigenous practitioners who, being closer to them socially, are supposed to be more capable of meeting their medical requirements. The following quotation from one of India's leading medical men puts this argument in clear focus, "What the people see as their real 'needs' are often radically opposite what the professional doctor or engineer or social workers see as their 'needs'. The temptation, therefore, is to tackle the 'needs' as seen, and assign the people's view to a second place, or to ignore it completely" [3]. In another place the author states: "In fact, a vastly expanded, powerful, entrenched medical profession is trying to thrust the benefits of 'modern' medicine down the throats of the people... the profession which considers itself part of the elite is culturally aloof from the vast majority of the people it is meant to serve" [4]. This quotation summarizes well the type of argument put forward by persons playing a leading role in the planning of health services in the country. It calls for close examination. What do the people see as their own needs? What are people's preferences between various systems of medicine? Has modern medicine failed to meet these needs because of certain intrinsic characteristics, or because of the manner in which it is made available to people? What is the ability of the traditional systems to meet people's felt needs?

We shall first examine the people's needs as they see them. The Narangwal study [5] clearly indicated that people readily accepted modern medicine in their desire for an effective cure. Many an indigenous medical practitioner (I.M.P.) in the area possessed the stethoscope and a majority of them used drugs from modern medicine. Eighty seven percent of all the patients seen by the I.M.P.s were treated with one or more "modern medications" either alone or in combination with traditional remedies. The busier and financially more successful I.M.P.s made extensive use of modern medicine, and the less successful ones attributed their failure to their non-use of modern rem-

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edies which provided "quick cures". Beals [6], in his study of a village in South India, noticed an increase in the number of illnesses reported to licensed medical practitioners. He also noted a tendency among people to seek modern aid for the more important family members.

These and several other studies show clearly people's manifest preference for modern medicine. They want a good curative service, and see prevention and promotion as secondary. The health administrators want people to reverse this order. The benefits of modern medicine are not being "thrust down the throats" of unwilling villagers. The fact is that if most medical interventions in India are in the sphere of curative medicine, it is mainly because people *want* it that way. Various experiments conducted in the country using the so-called "alternate approaches to health care" have underlined the importance of first providing an adequate and effective curative service which would in turn pave the way for launching other health programmes [7]. Indeed a curative service is a good aid in developing the rapport between the people and the medical team which may be utilized for a health education program. Many anthropologists who have used a medical kit in the field to build good rapport will testify to this. If the first "felt" need of the people is for an efficient curative service, the second is a preference for modern medicine because of its greater curative properties in contrast to traditional or indigenous medicine, provided it is *easily available to them*. People may rely on traditional practitioners when modern medicine is *not* available to them easily and adequately. This does not warrant the conclusion that they *prefer* traditional to modern medicine, as some scholars and politicians claim. Studies of choice of medical system must take this into account.

All this is recognized by the health administrators and planners. They are only too conscious that the rural areas have anything but a satisfactory curative service, and hardly anything at all in terms of preventive and promotive care. The practitioners of modern medicine are held responsible for the inadequate medical services, and for not wanting to go to rural areas. The doctors are said to have Western urban orientations and elitist interests which make them indifferent to rural people. Fault is found in their education, which is thought to render doctors unfit for rural practice by training them to work with sophisticated equipment in a highly bureaucratized hospital based on "Western models". The doctor in India is said to be culturally and socially aloof, and officious in manner. He is unfavourably contrasted with the traditional practitioner, who is said to share the same world view as his rural clientele and therefore to be more acceptable to them.

The argument directed towards medical education runs as follows: society invests more than 80,000 rupees in training the young doctor, but this education fails to equip him to fulfill society's expectations. It does not motivate him to settle in rural areas where 80% of the population lives and acutely requires his services. Instead, after graduation he chooses a more lucrative job abroad, or settles down in an urban area. "His professional and mental outfit are attuned to urban life. It is considered *infra dig* to think of setting up practice in a rural area" [8].

I may note in passing that it is not only the graduates in modern medicine who flock to cities, but learned practitioners of the Ayurveda and Unani systems as well, have always preferred to settle in urban centres. The same love of the urban is endemic among the country's teachers, engineers, lawyers, scientists, and bureaucrats, who have similar social backgrounds as the doctors. Even rural youths with a high school certificate prefer to try their luck in urban areas. What I would like to point out here is that it is fashionable to subscribe to the bogey that his medical education renders the doctor unfit to work with the majority of Indian patients. It is one thing to stress the desirability of reorienting medical education to the morbidity profile of the rural and urban areas in India, and to raise the rapidly declining standard of theoretical and clinical training of physicians. It is altogether a different thing to claim that something specially wrong with medical education makes the doctors disinclined to practice in rural areas. One has to probe the problem of the general disinterest to work in rural areas found among all well educated occupations and not exclusively in medicine.

As for the doctors, my own observations show that one specific reason they do not opt to work in rural areas is the lack of even simple basic facilities and drugs, much less the 'sophisticated' equipment they are supposed to be accustomed to. That this is an important reason can be seen in the fact that medical complexes located in rural areas which have satisfactory working, living and other facilities for the staff, and an efficient referral system, do not face the problem of recruiting capable doctors. They also provide a satisfactory health service to the surrounding areas. The medical complexes at Vellore and Chingleput are examples. In this context, one may argue for setting up medical complexes in small towns, rather than concentrating them in big cities.

I have already mentioned that medical practitioners in private enterprise will be, not unexpectedly, influenced by forces of the market situation in selecting communities for setting up medical practice. They see the urban areas as more profitable. However, doctors in government service have other considerations for not wanting to go to rural areas. The government itself treats postings in rural, remote, and difficult areas, more as a "punishment" than as a necessary phase in a career. Thus, doctors do not want to inflict this "punishment" on themselves. Therefore, the argument that medical education per se comes in the way of the doctors working in rural areas, does not hold much ground. The issue is multidimensional and complex and needs detailed examination.

One should also question the argument that since the differences in social backgrounds of doctors and patients causes the unwillingness to work with rural folk, this reluctance could be overcome by recruiting doctors from rural areas. Doctors' in any case deal with rural people even in city hospitals. As for rural background, it is not realized that even if he came from a village, his being educated will be enough to alienate him from his rural background and make the doctor seek his future in urban areas, like any other educated youth from the village.

The more basic question is, how much importance should be given to similarities in social backgrounds

of doctors and patients as an essential ingredient of the medical process? Will such similarities solve the problems of the doctors' unwillingness to work with rural clientele and the latter's rejection of the representative of the "alien" system of modern medicine? I have witnessed in the general hospitals in Delhi, the unsympathetic, if not indifferent and rude treatment meted out to patients by persons occupying lower echelons in the hospital hierarchy (orderlies, maids, sweepers, etc.) who are much closer to patients socially and culturally than the doctors. Given this similarity in social backgrounds, one would have expected a different sort of behaviour. Here again, there is much more to the problem than simply the social differences between the doctor and patient.

I will next examine the extent to which traditional or indigenous medicine caters to the medical needs of the people. Unfortunately, there is only limited data on the numerical strength of various types of medical practitioners other than those practicing modern medicine, particularly in the rural areas. Whatever is available indicates that their number is really large. In the Pakhowal Block in Punjab [9] for instance, indigenous practitioners population ratio was found to be 1:1500. They outnumbered doctors 10:1. The assumption of Kochar, Marwah and Udupa is that a village of one thousand population may be expected to have "... five to seven well recognized folk practitioners (not including folk healers, and the allied health roles). This man-power is many times larger than the man-power within the other systems (about 86 percent of the total).... The economic support to the folk health system is roughly about ten times larger than the economic support to the formal health system" [10].

Evidently, there seems to be no scarcity of indigenous medical practitioners in most rural areas of the country. But there are disagreements about their efficacy as healers even though they may share the same world view as their clients. One does not easily find clear statements critical of the limited role played by these practitioners in providing medicare to the people. Yet statements by prominent men indicate a recognition of this failure. Take, for instance, the statement that rural areas "have little or no access to even rudimentary form of health care—the medical man power is concentrated in urban areas to the utter neglect of rural health care" [11]. Since medical practitioners of various sorts are available in large numbers in rural areas, if these areas are devoid of even rudimentary health care, then these practitioners are not contributing anything to medicare. The fact that their contribution, if any, goes largely unnoticed makes one wonder whether they make any significant contribution. Certainly, in the rural epidemiological profile, the morbidity figures are predominantly related to relatively simple, easily curable diseases (at least from the modern medicine point of view). The fact that such disorders exist in such large number despite the availability of numerous traditional practitioners, only serves to underline the failure of these practitioners to provide even an elementary curative service. Nonetheless, one learns that vast resources, financial and others, are invested by people in these practitioners. Surely, these resources could be put to use in a proper health service. Furthermore, the state-

ment that rural areas have only 20% of doctors, indicates that the speaker does not consider these other practitioners worth including in the "20%" of the "medical" manpower statistics in rural areas.

One has to be clear on one point: either these other practitioners are contributing to medicare or they are not. In the latter case, one may wonder why the country's limited resources are invested in encouraging practitioners who not only fail to cater to the real medical needs of the people but also pose hazards to their health. Evidently, certain non-health, or vested political considerations not only allow but encourage them to exploit the rural folk. One should, however, distinguish between patronising these practitioners, and encouraging research into traditional remedies to establish their worth scientifically, and then to incorporate them into one overall system of health services. Considerable research activity is going on in the direction of systematically scrutinizing the claims of traditional medicine. Effort could certainly be augmented in this direction. What is being questioned here is the feasibility of establishing parallel health services in different systems of medicine.

What is generally missed is the universalistic and eclectic nature of modern medicine, quite appropriately referred to as cosmopolitan medicine by Dunn [12]. This characteristic enables the system to absorb elements from any source after subjecting them to scientific scrutiny. There are now quite a few examples of traditional Indian remedies that have been incorporated into modern medicine. The State should invest resources into research on traditional remedies, but this is quite different from the problem of formulating a satisfactory health service.

Medicine in practice is influenced by the local society and culture. This is very true of modern medicine and its practice in the Indian context. To a critical observer, the manner in which modern medicine is practiced in various institutional frameworks in India, has a distinctly Indian flavour and is not a replication of "western models", whatever they are supposed to refer to. Thus, in the Indian context, if the existing health service is elitist, as is said by many, it is not so much because modern medicine has an inherent tendency to create social differences, but because the delivery system is favourably tilted towards the elite for reasons extraneous to modern medicine. This is also true of other spheres of life than medicare. I need not go into the question of how best to rectify this situation of unequal access in this paper. But one thing is obvious. There cannot be social reform just in one sector of the society. What I have tried to do here is to put the problem in the sphere of medicine into its proper perspective.

## VI

I shall briefly go into the distinction between the medical and the non-medical interventions in health. This is related to the question of redefining the relationship between preventive, promotive and curative aspects. There is a need for clarity on what is to be included in each aspect of health services, what out of these aspects is to be called medical or non-medical intervention.

Preventive and promotive aspects should be ident-

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ified in all systems of medicine, e.g. the emphasis on yogic exercise, ideas and injunctions about personal cleanliness, diet, and other hygienic practices conducive to good health found in the traditional systems, and immunization, ante-natal care, paediatric care, etc. in the modern system. These should be separated from the curative aspects. Only after this exercise should various actions be appropriately labeled as purely medical or non-medical interventions. For example, physical exercise, personal hygiene and cleanliness, provision of safe drinking water and various aspects of environmental sanitation, would be categorized as non-medical, and ways should be found to launch a programme to give them effect, with personnel different from those engaged in purely medical interventions. Thus, instruction in physical exercise and in personal hygiene may be given over to schools and other associations in the community. Some may even like to see the issues of environmental sanitation, food inspection, safe drinking water, etc. included in the realm of "developmental activities" along with, say, agricultural improvements. These would then draw financial support from development activities rather than from the financial allocations made under health or medicare.

Such an approach will free the persons with medical training from carrying out tasks which are really non-medical, and enable them to concentrate on specific medical concerns. For instance, the medical personnel will be called upon to treat all cases of gastro-enteritis, or hook worm anaemia or typhoid, and in addition to treating these patients, they may indicate that the consumption of contaminated water and milk cause epidemics of gastro-enteritis or typhoid, and may also suggest means of reducing their incidence. They need not be called upon to ensure that the community arranges for safe drinking water or proper means to dispose of fecal matter. They can certainly advise the community to ensure these facilities, and thus bring down the incidence of anaemia, typhoid, cholera, etc. But it is the job of other agencies to arrange for these facilities. To take an analogy, if doctors advise helmets for scooterists and seat-belts for motorists, to minimize the morbidity of accidents, one does not expect medical men to ensure that this advice is followed.

The separation of various dimensions of a community's health into medical and non-medical aspects will enable us to focus our attention on the view that health is as much determined by socio-economic changes in the wider society as by the application of medical technology. In most underdeveloped countries, the former is of crucial importance, even though the latter cannot be over-emphasized. Once this is kept in mind, the doctors and their medicine will be seen to have only a limited role to play in raising the overall health status of the community. I shall quote here from a study in south India which develops this argument very cogently: "... the Thaiyur people will improve their health not only by consuming more

allopathic medicine, but by improving their economic lot... the people's of the Western world got rid of the poverty panorama, more as a result of increasing prosperity than as a result of the advancement of medical science. The Chinese people seem to have taken the same road. Today they are well fed and clothed, and they live in decent houses. Economic betterment has brought tremendous improvements in their health. This road is the only one open to the people of Thaiyur. We think we can demonstrate at least one thing, viz., that the other road is closed: no matter how sophisticated, allopathic medicine cannot take these people out of the poverty panorama" [13].

Health services must be seen in a perspective distinguishing the medical from non-medical interventions if the aim is to raise the level of health and well being. I have tried to show in this paper that the real problem of health services has been diffused, side-tracked and obscured by assumptions, misconceptions and generalizations in the minds of health planners about various systems of medicine. These are partly due to the lack of clarity about the problems posed by medical pluralism in India.

#### REFERENCES

1. Taylor C. E. The place of indigenous medical practitioner in the modernization of health services. In *Asian Medical Systems* (Edited by Leslie C.), p. 89. Univ. California Press, Berkeley, 1976.
2. *Ibid.*, p. 298.
3. Antia N. H. Alternatives to health care system. In *Alternative Approaches to Health Care* (Report of a Symposium organized jointly by I.C.M.R. and I.C.S.S.R.), p. 112. New Delhi, n.d.
4. *Ibid.*, pp. 102, 103.
5. Neumann A. K. et al. Role of indigenous medicine practitioners in two areas of India: report of a study. *Soc. Sci. Med.* 5, 137, 1971.
6. Beals A. R. Strategies of resort to curers in south India. In *Asian Medical Systems* (Edited by Leslie C.), pp. 184-200. Univ. California Press, Berkeley, 1976.
7. See Indian Council of Medical Research. *Alternative Approaches to Health Care* op. cit.
8. Government of India, Ministry of Health, Family Planning, Works, Housing and Urban Development. *Medical Education Conference*, p. 16. New Delhi, 1971.
9. Neumann et al. op. cit.
10. Kochar V., Marwah S. M. and Udupa K. N. Strengthening the folk health system: proposed link between the health needs of the rural population and limitations of the formal health system in remote rural areas. In *Alternative Approaches to Health Care*, op. cit., p. 208.
11. Indian Council of Medical Research. *Alternative Approaches to Health Care*, op. cit., p. 1.
12. Dunn F. L. Traditional Asian medicine and Cosmopolitan medicine as adaptive systems. In *Asian Medical Systems* op. cit., pp. 133-158.
13. Djurfeldt G. and Lindberg S. *Pills Against Poverty: A Study of the Introduction of Western Medicine in a Tamil Village*, p. 101. Oxford, New Delhi, 1975.



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## THE LAYPERSON'S PERCEPTION OF MEDICINE AS PERSPECTIVE INTO THE UTILIZATION OF MULTIPLE THERAPY SYSTEMS IN THE INDIAN CONTEXT

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**Abstract**—This paper discusses the layman's perception of medicine in South Kanara in relation to habitude, power, diet and physical characteristics. It describes how perceptions of medicine influence behavior and the use of multiple therapy sources. The data suggest issues for future studies on patterns of resort in multiple therapy systems. Finally, the paper discusses the public health implications of the data it presents.

### INTRODUCTION

In most countries, multiple therapy systems and a diversity of health behavior patterns coexist despite the efforts of governing bodies and the vested interests of dominant therapy systems to regulate the health behavior of populations. The status, growth and evolution of coexisting therapy systems has been influenced by cultural ideology, ecology, political patronage, changing social institutions, disenchantment with and romanticization of values represented by therapy systems (or their supporters), nationalist and revivalist movements, competition within expanding health arenas and international medical markets and by the processes of professionalization and specialization. Given the complexity of these factors, it is difficult to assess the layperson's perspective of health and felt needs amidst a barrage of statistics and rhetoric produced by factions supporting competing therapy systems and/or the bureaucracies which derive their existence from them.

Considerable attention at this conference has been rightly focused on the anthropology of health; social structural aspects of the health sector and the control of health resources by therapy systems. As a contrast to more systemic macro-level presentations, this paper will be concerned with a view of medicine from the bottom up; that is, from the vantage point of the rural South Kanara layperson living in a rapidly expanding pluralistic health arena in South India composed of cosmopolitan,\* professional ayurvedic, traditional ayurvedic and folk practitioners. I will focus attention on ways in which the layperson thinks about medicine and how these perceptions effect the utilization of alternative therapy systems. My emphasis will be on the most common ways medicines are spoken of and thought about by the non-Brahman layperson; data gleaned from conversations with numerous villagers seeking medical aid and sittings in the shops and offices of a cross section of practitioner types. Following these observations, I will highlight issues such data raises for research on

the utilization of multiple therapy systems and discuss the implications of the data for the field of public health.

Before discussing the South Kanara villager's perception of medicine, however, it is necessary to question a rather misleading stereotype of the Hindu villager and describe the contemporary health arena within the setting of the bazaar. A questioning of the portrayal of the rural villager as "thinking" within an ayurvedic cognitive framework is warranted by comments which have inferred that ayurveda is a system of therapy closely related to folk ideology [1]. It is worth emphasizing that the metamedical dimension of ayurveda [2] is more closely related to Brahmanic ideology than folk culture and the layperson's notions of ayurveda are contingent upon stereotypes of Brahmanic ideals. A brief description of a town health arena, as seen through the eyes of a villager, will be presented as a means of highlighting the eclectic practice of medicine in India, the villager's ambivalence toward "commercial" practitioners dispensing medicine in a business like fashion, and the notion of "brands" of medicine. This description is meant to complement remarks made by Leslie [3] which denote the widespread integration of indigenous and cosmopolitan medicine in the health arena and characterize the villager seeking medical assistance as being more concerned with questions of cost, time and empathy than types of therapy system. While I agree with Leslie to some extent, I will qualify his remarks on choice of therapy on the basis of data presented elsewhere on illness specific patterns of resort [4] and data presented at this time on the layperson's perception of medicine. We will see that villagers are indeed concerned with the types of medicine they choose to utilize at particular times (such as pregnancy and early childhood) and that perceptions about the action/reaction of medicine, not only illness and cure, influence health behavior.

### AYURVEDA: FOLK HEALTH IDEOLOGY BRAHMANIC WORLD VIEW: VILLAGE WORLD VIEW

In many ways a discussion of the relationship between ayurveda and South Kanarese folk health ideology is similar to a discussion about the Brahma-

\*Cosmopolitan, following Charles Leslie's use of the term will refer to allopathic medicine. In the text, it will also be referred to as "english" medicine (a locally used term) when referring to comments of informants.

nization of the South Kanarese pantheon (Nichter, 1977). I may exploit this comparison while noting that ayurvedic and Brahmanic world views are closely aligned philosophically. The South Kanarese pantheon is composed of numerous indigenous Tuluva deities as well as pan-Indian gods, just as the indigenous health sector is composed of numerous folk healers and a few influential ayurvedic pandits (a majority of whom are Brahmans or Keralites steeped in Brahmanic tradition). Just as Brahman priests have, over the years, encompassed Tuluva deities within a distinctly Brahmanic cosmology and organizational structure, so ayurvedic pandits have encompassed indigenous health notions and practices within their own highly elaborate and accommodative conceptual universe. The legitimacy of the encompassment has been facilitated by the high (and to some degree sacred) status afforded by Brahman priests and ayurvedic practitioners, *vaidya*, by influential patrons.

What is important to note at this time is that while Brahmanic statements about hierarchy and order in the cosmos and ayurvedic statements about illness are accepted as authoritative the actual impact of both Brahmanization and ayurveda on Tuluva ideology has been minimal. While the principles of ayurveda are publicly acknowledged as eternal truths, the layperson's comprehension of ayurveda is limited to a few names of illnesses, patent medicines and ayurvedic terms, which for the most part have taken on local significance. For the average layperson, the understanding of ayurveda's central most principle of body humors, the *tridhatu/tridosha* is limited to a notion of dosha, troubles, and not body processes. Humoral nomenclature, *vata*, *pitta* and *kapha* have, like the term 'liver' (more recently introduced by cosmopolitan physicians) become synonymous with illnesses and symptom complexes.

Three points may be made about the practice of ayurveda which I feel have fairly widespread validity in rural India. First, the response to illness by the non-Brahman lay population does not reflect a formal (even rudimentary) ayurvedic explanatory model despite the fact that ayurveda and folk ideology share points of commonality, e.g. the hot-cold idiom. I do not mean to belittle the impact of ayurveda on lay health behavior by this statement, but wish to emphasize that individual ayurvedic practices, not an ayurvedic explanatory model have influenced behavior patterns. A second point is that the practice of orthodox ayurveda represented in classical texts is not presently, nor has been (in recent history) a popular form of therapy utilized by the majority of the rural poor nor is it affordable to them. The notion that *systematic* ayurvedic therapy, based upon ayurvedic diagnostic principles, is readily available in village India is unfounded and the notion that such therapy is inexpensive (or less expensive, in general, than allopathic medicine) is a myth. A third and related point is that the system of ayurveda as presented in texts and by authoritative pandits is not understood by most herbal practitioners although many of these practitioners are classified as practitioners of ayurvedic medicine on surveys because they administer common ayurvedic regimes. This latter observation is based on my own familiarity with formal ayurvedic theory and interviews with numerous practitioners in

Karnataka and elsewhere about such basic ayurvedic principles as *rasa*, *virya* and *vipaka* (principles governing the qualitative action/reaction of taste in the body).

Now that the rather tenuous relationship ayurvedic and local health ideology has been highlighted, we may turn our attention to a view of the "commercial" health arena; that is, sources of therapy which are dependent on commercial, not self produced medicines. We may appreciate the position of a quasi-literate villager wandering in the bazaar in search of therapy for an ailment which is not strongly associated with one etiological factor or a definitive pattern of resort.

#### QUALIFIED AND UNQUALIFIED MASALA MEDICINE

Let us imagine a villager who travels to a nearby town or city to obtain medical aid after exploiting more accessible sources of aid. Numerous medical shops are found in most fair sized towns and cities and the villager strolls past a few. As the villager looks into each shop, he probably pays little attention to the qualifications boldly written or scribbled under the names of each practitioner. This is hardly surprising considering the proliferation of abbreviations which are displayed. Abbreviations for cosmopolitan, indigenous professional and integrated (ayurvedic and allopathic) medical diplomas, issued by different states at different points in time are intermixed with initials designating government legislation, homeopathic correspondence courses, the possession of a university certificate (some cases, certificates of attendance not completion!), foreign training or residence and membership in little known and oft-time bogus professional societies. During my first visit to the small city of Mangalore, I counted nineteen different abbreviations under the names of practitioners, nine of which I was never able to identify.

Rather than look at qualifications, the villager focuses attention on the types of medicines and paraphernalia exhibited in medical shops. By looking at the medicines and paraphernalia in these shops, however, it is difficult to distinguish the type of therapy system which a practitioner is practicing. Many institutionally trained, as well as non-institutionally trained, registered medical practitioners engage in an eclectic form of therapy which draws from all existing therapy systems. Their shops display hypodermic sets and stethoscopes as well as hand labelled bottles of ayurvedic tonics, tins of metallic oxides and a few vials of homeopathic pills. The offices of recent graduates of ayurvedic and homeopathic colleges commonly display stethoscopes as well as a carefully laid out stock of commercial ayurvedic/homeopathic medicines bottled and packaged in much the same way as allopathic medicine. In most offices, a syringe and a collection of allopathic and ayurvedic injectables (indistinguishable to the villager) are conspicuous. It is also not uncommon to see joint clinics where both allopathic and ayurvedic drugs and services are found under the same roof. As Leslie [5] has suggested, many of these joint clinics are managed by two generation medical families adapting to a competitive medical market.

We see that our hypothetical villager walks through

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a bazaar, where the medicines and paraphernalia of coexisting medical cultures are displayed to attract the passerby. The practice of medicine, particularly by less expensive practitioners who are attractive to the villager is eclectic, and in the words of one informant, "masala"—mixed to the taste and pocket.

Let us imagine that the villager inquires of relatives about the type of treatment given by various practitioners in the town. What types of description would he receive? While listening to numerous descriptions of practitioners, I found that comments were often made about the general cost of a practitioner's treatment or a practitioner's power of the hand (often for curing specific illnesses or for giving medicine to a specific age group). Many other comments, however, were made about a practitioner's medical paraphernalia or the kind of medicine he dispenses. It was not uncommon to hear practitioners spoken of in terms of the form of medicine they gave for a particular ailment, e.g. single injection, "double" injection (distilled water and a vial of medicine), injection-powered pills (capsules) or tonics for a particular type of ailment. It was also not uncommon to hear villagers speaking of practitioners in terms of the type of stethoscope (known locally as "dekree") which the practitioner possessed. German, English and Indian stethoscopes were credited with having varying capacities to locate illness. To some extent, the villager's faith in the reading of the pulse by ayurvedic professionals has been transferred to the stethoscope; the achieved ability of medical technology is given similar status to the ascribed ability of the practitioner. Moreover, villager's requests of practitioners to touch the body near the location of illness with the stethoscope resemble requests for the laying of hands. Thus a second aspect of *kayi guna*, the power of the hand is transferred to the stethoscope.

Other descriptions of practitioners by laypersons portray them as agents of pharmaceutical firms, distributing particular brands of medicine. Some villagers spoke of going to a practitioner in the town as going to the "company". Their attitude is reflected in the fact that when a therapy administered by one practitioner was not considered efficacious, the appropriateness of the medicine for the patient was as often questioned as the skill of the practitioner. A prevalent idea was that the medicine might be appropriate for another person manifesting similar symptoms (if not the same illness category) because of differences in body constitution. In such cases, a patient would demand a different kind of medicine from the same practitioner or go to a different practitioner for a different "brand" of medicine. A survey of 150 illness episodes (involving general ailments, symptom state, or illness for which no definitive patterns of resort was indicated by survey), revealed that the average length of time a villager taking medication was willing to wait for symptoms to diminish or disappear before seeking an alternative treatment was four days, the equivalent of 1.5 visits to the practitioner. The lowest periods of waiting were among those families having the greatest economic capacity (within the range of Rs. 200–600 per month family income). There was little difference between families whose heads were illiterate, barely literate, or educated up to matriculation.

This trial and error approach creates a client-dominant [6] medical market characterized by low compliance. A survey of rural South Kanara families revealed that 75% of 50 families did not maintain an established relationship with any practitioner. As the villager circulates within the health arena he is, as Leslie has suggested, more concerned with time, cost and empathy on the part of the practitioner than the type of medical shop/office (if not therapy system) consulted. However, during consultations involving common ailments, villagers demand from practitioners the kinds of medicine they want. My sittings in many practitioner's offices and chemist shops revealed that while villagers commonly confused which type of shop/office they were visiting (in terms of a predominant therapy system) it was not uncommon for them to ask for specific types of medicine. Their interest in types/forms of therapy often superseded consideration of therapy system. A primary concern was obtaining medicines made from either raw herbs or commercial product (regardless of system). Commercial products were viewed as general "brands" of medicine more often than they were associated with different therapy systems or explanatory models of health. We may now consider the ways in which medicine is viewed in respect to habitude, diet and physical characteristics (form, color and taste). We may gain further insights into stereotype perceptions of cosmopolitan/english medicine and ayurvedic medicine.

#### HABITUATION (ABHIYASA)

That plant is a good medicine for fever; it was used by my father. I do not use it...I have taken many injections...herbal medicine does not "take to" my body.

(excerpt from fieldnotes)

The concept of *abhiyasa*, habitude, is a counterpart to the concept of body constitution *prakrti*. One is born with *prakrti* but one gains *abhiyasa* through experience and "adjustment". The difference between the two concepts is that one can alter *abhiyasa*, in the words of one villager, "the way a rice eater adjusts to be able to digest wheat after some periods of time," *Prakrti*, on the other hand, cannot be altered, "just as some thin men cannot be made fat despite the quantity they eat". An analogy can be drawn between the concepts of constitution and habitude and one's fate and *karma*—the fruit of one's work:

nontransformable: transformable

<i>hanne baraha</i> (un-qualified fate, what one is):	<i>karma</i> , including inherited obligations and responsibilities (reaping what one has)
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<i>prakrti</i> (one's constitution):	<i>abhiyasa</i> (what one gains through experience).
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An appreciation of *abhiyasa* is important for understanding health behavior. It is common to hear a villager describing why a medicine has not been useful for him because he has no *abhiyasa* for that kind of medicine. This comment is made of both cosmopolitan and herbal medicine. During a health behavior survey in 1974, I asked 100 adults stratified by caste and class whether they thought herbal medicine (folk as well as ayurvedic) was as effective as it had been 20



years prior. Over 90% of informants answered that herbal medicine was less effective. The reasons given for this phenomena included changes in diet, a decreased potency of raw drugs and an increased tea drinking, but the most frequently mentioned reason was the increased use of "english" medicine. According to the concept of *abhiyasa* for the body to take to a new food or type of medicine it must first adjust to its properties. Thus, a South Kanara mother feeds a young child minute quantities of food prior to weaning so that the child will later be able to digest the food. In the case of medicine, a young child regularly receives herbal preventive medicine for a number of culturally defined illnesses. Cosmopolitan medicine is generally not administered unless a crisis occurs. A breastfeeding mother avoids the extensive use of cosmopolitan medicine herself, lest it be transferred to the child through breastmilk. Cosmopolitan medicines are thought to be too powerful for a child's body to accommodate. They interfere with child's capacity to "take to" the herbal medicines used in the home for preventive and common curative functions. Children over three are gradually introduced to cosmopolitan medicine through crises involving illnesses which the villager believes to be managed faster by "english" medicine. Thus, the young lose their habituation to herbal medicine and gain habituation to cosmopolitan medicine. But at what cost?

When one is habituated to cosmopolitan medicine, herbal medicine is thought to be less effective. Many villagers think that english medicine offers a quick cure but eventually harms the overall integrity of one's health. This concept is expressed by the statement that "english" medicine is heating and its continued use leads to bloodlessness and weakness. One literate informant drew the following analogy between chemical urea fertilizer and "english" medicine:

"English" medicine and urea are both powerful, heating, and harmful after some years of use... certainly, they are popular—urea makes crops green overnight and increases yield until one day you find that the earth is hot, acidic, and useless. Injections are like that too. You take them and feel better quickly but later your body turns weak... yes, the agricultural extension officer tells us to balance urea with potash and other chemicals and that this will prevent the soil from becoming hot. The doctor tells us to eat good food, drink milk, and take tonic and we will not have after effects from the injections he gives us. But this is not how we live... we don't drink milk or take tonic daily nor do we use fertilizer the way they tell us... this is not our habit—such things are costly and we have other needs.

The concept that the use of "english" medicine leads eventually to weakness also expresses other concerns. In developing an *abhiyasa* to "english" medicine, the villager enters into a dependency relationship. A sense of understanding the body is forfeited, resulting in weakness and loss of control. This is not to say that one cannot regain an *abhiyasa*. This possibility is entertained by patients who undertake a medicinal rite de passage, characterized by blood purifiers, purgatives and diuretics. Patients who have

an ailment which cosmopolitan medicine has failed to cure use these substances, and so do people who seek realignment with herbal (folk, ayurvedic) medicine as a symbol of identity. This latter group includes revivalistic Hindu leaders who have championed ayurveda for political purposes.

#### POWER

Comments about a medicine's power are common when therapy is discussed. Villagers consider medicine in relation to both its inherent power and the ability of the patient to accommodate to it. Powerful medicine is desired by those whose body can stand the "shock". The shock factor is considered carefully when a villager has a constitutional weakness, when a chronic illness renders one weak but demands long term treatment, and during times of vulnerability such as pregnancy or confinement following delivery. Shock is also an important consideration for infants, particularly if such children are deemed weak.

As a category and a stereotype, "english" medicines are spoken of as powerful. Let us consider what the concept "powerful" means to the villager. Conceptually, power is regarded as unstable, vascillating, and requiring control; a factor evident in ritual healing as well as in the worship of deities [7]. While english medicine is praised for fast action, it is almost always spoken about as having "uncontrolled" side effects. Ayurvedic medicine, on the other hand, is referred to as a controlled medicine, aimed at balance. Ayurveda is stereotypically spoken of as causing no side effects—a comment of as great symbolic importance as a statement of actual fact. The following analogies used by informants suggests the ways in which they perceive ayurvedic and allopathic medicines. One analogy contrasts the stable Brahmanic, vegetarian gods and the rash, temperamental (blood demanding) deities of local *būta* cults, comparing them to the same relationship between ayurvedic and "english" medicine

Uncontrolled	power/desire	Controlled power/balance
Immediate	action, often rash action	Justice, <i>dharma</i>
<i>Būta</i> deities		Brahmanic deities
Requiring blood sacrifices		Requiring vegetarian offerings
English/cosmopolitan medicine (reducing blood)		Ayurveda (producing blood)
Heating		Balanced, <i>sama</i>

"English" medicine is referred to as heating and ayurvedic medicine as *sama*,\* neutral, although individual medicines within each system are recognized as heating and cooling. Saying that "english" medicines are heating is a statement about the speed at which they act. Also, it infers uncontrolled activity. *Sama*, as the term is applied to ayurvedic medicine expresses balanced action and the concept of control. Stating that "english" medicine is heating also infers something about its perceived effect on the blood. The notion exists that heating the blood causes it to evap-

\* *Sama* is a shortened version of the Sanskrit term *samadhatu*. In the regional language, Tulu, informants prefaced the use of this term by *wow edde* (that's good) or *dal tundara iji* (without causing trouble).

orate. In Tulu, the expression used to explain this process is *netter ajune*; *ajune* is the verb used to describe water evaporating from a boiling rice pot. Since digestive capacity is related to the quantity of blood and to general strength the statement that "english" medicine is heating conveys a wide range of general symptoms of malaise as well as symptoms such as burning skin rashes and burning urine which are more readily associated with heat.

Some villagers frequent ayurvedic/folk practitioners weeks or even months after taking cosmopolitan therapy for medicines to cool the body and replenish blood loss. The point is that indigenous medicine complements cosmopolitan medicine by restoring the integrity of body processes which powerful medicine has disrupted. The notion that powerful medicine disrupts body processes and causes weakness is one reason why "english" medicine is not favored for the very young or old. It is not because villagers "have not experienced the wonders of cosmopolitan medicine" that they use such medicine sparingly or utilize indigenous medicine for their children. It is precisely cosmopolitan medicine's display of power that leads adults to use it themselves while shying away from it for young children.

Medicines administered for one purpose are sometimes used for other purposes on the basis of assumptions about how they effect the body. For example, menses is thought to be a state of overheat in the body—"like a rice pot boiling over". When a woman suffers from amenorrhoea a cosmopolitan practitioner or chemist shop will often prescribe a hormone booster such as E. P. Forte to induce her period. The laywoman's interpretation of the drug's action is that it causes the blood to heat up and the *vayu* (wind principle) to push the blood out of the body. Accordingly, a popular notion is that if two tablets are powerful enough to induce menses then a double dose will heat the body enough to induce an abortion. A flourishing trade exists in towns with women purchasing four tablets when they think they are pregnant and want to abort. College girls take these tablets as a morning after pill.

Villagers manipulate medication based on their perceptions of power gradation in cosmopolitan therapy. Villagers perceive tablets as weaker doses of medication than injections and a notion exists that a single injection is a weaker dose of medication than a double injection—a term referring to a test dose and an injection, or to an injection where the villager observes a vial of distilled water being mixed with a vial of powder. Such being the case, some villagers try to enhance the power of their medication against the instruction of practitioners. If one tablet does not yield satisfactory results, two or three tablets are taken simultaneously and if a single injection is given for an ailment for which a friend has received a double injection, another practitioner may be frequented for another injection without mention being made of prior treatment. I never saw or heard of this strategy being applied to indigenous therapy. One reason, perhaps, is because it is not merely the power of the drug which is considered in indigenous therapy, but notions such as balance, purification and digestive effect.

With respect to the cosmopolitan "display of

power" it may be noted that common acts associated with the administration of cosmopolitan medicine are interpreted as increasing the power of the medicine. For example, the heating of a needle before an injection is interpreted not as a sterilization procedure but as a method which increases the power of the medicine and the speed at which it travels through the body (*vis-à-vis* heat). We will see shortly that dietary advice offered by cosmopolitan practitioners such as the advice to "drink milk", reinforces the idea that cosmopolitan medicines are both powerful and heating, thus requiring the ingestion of cooling substances to control these properties.

#### DIET

One of the most common questions a villager asks any type of practitioner during a consultation is what types of food should and should not be consumed. The question refers both to the patient's illness and the type of medication administered by the practitioner. The villager already maintains a number of folk ideas about the required diet in accord with a fairly complex food classification system. He expects that a practitioner will offer advice about diet after considering the illness, the patient's body constitution and the qualities of the medicine administered.

Foods are thought to enhance and facilitate the action of medicines, and to provide a means of balancing the extreme qualities of medicines. For example, most impoverished villagers in South Kanara drink milk only during times of illness and when taking medicines. Traditionally, ayurveda has placed great importance on milk, buttermilk and ghee both in the preparation of medicines and as a vehicle, *malpudi*, to assist the medicine "to be taken" by the body. In this case, milk is thought of as enhancing the medicine's action. This notion has been incorporated in folk therapies to a lesser extent. In respect to cosmopolitan medicine, however, milk drinking plays a different role. Milk is thought to reduce/control the heating side effects of cosmopolitan medicine, particularly when it is in injection form. This stems in part from the nutritionally orientated advice offered by cosmopolitan practitioners to drink milk. Villagers have interpreted this advice as an indication that cosmopolitan medicine is very heating and so requires milk as a counterbalancing agent.

Milk is not only thought to be a necessary commodity to be taken after an injection or capsule [8] but a substance which may be used by villagers attempting to limit the action of medicine. For example, piperazine citrate, a deworming medicine is considered very heating for the body. Some villagers drink a glass of milk a few hours after taking piperazine as a means of limiting the heating action of the drug. According to indigenous notions of physiology, an optimum number of worms existing in a symbiotic relationship with the body are thought necessary for the digestive process. In an effort to retain at least a few worms, villagers drink milk to constrain the medicine's action.

The importance given to milk by villagers effects compliance behavior. I have spoken to many villagers who were reluctant to take cosmopolitan medicine for long periods of time if a supply of milk was not avail-

able to them. Other villagers reduced the quantity of medicine which they took because milk was unavailable. This was particularly the case where a large number of tablets were prescribed each day—6 sulfamadzide tablets, for example, followed by a practitioner's advice to drink plenty of water (to flush the kidneys). More sensitive practitioners recognizing the importance that villagers place on balancing heating medicines by the use of cooling substances, advise the drinking of tender coconut water or lemon juice as substitutes when milk is unavailable.

The ambivalence paid to diet by most cosmopolitan practitioners has resulted in confusion on the part of patients. Some villagers have come to view cosmopolitan medicine as requiring no specific diet. For example, village women who deliver at PHCs do not follow traditional dietary restrictions while they are taking hospital medicine. The perception that diet is unimportant when taking medication is furthered by the fact that foods supplied to patients by the Government Health Service are counter-indicated by traditional dietary rules during times of illness and convalescence. A good example of this is blackgram, classified as toxic, *nanju* and traditionally avoided during illness. In the hospital, however, blackgram preparations, *idli*, are commonly served. Villagers will eat such foods when they are in the hospital but abstain from them once they have returned home to convalesce. If infections manifest later, it is not uncommon to hear family members blame inappropriate foods consumed at the hospital as the cause. The effects of *nanju* food are thought to be suppressed by cosmopolitan medicine not eliminated.

Another reaction to the cosmopolitan practitioner's lack of sensitivity to diet is that the practitioner is viewed by villagers as knowing about technical cures, medicines which reduce symptoms, but not much about health. The practitioner is not thought to understand the patient's constitution, dietary needs or how foods and medicines act and react in the body. This finding was corroborated by an open ended survey wherein 70% of 50 non-Brahman informants made a related statement in the course of dialogue on the knowledge of practitioners about health (not illness). While this perception of the cosmopolitan practitioner has not decreased their popularity for the cure of illness, it has effected the villager's attitude toward such practitioners as someone who can give appropriate advice about preventive and promotive health. This is a pity for the survey found that most villagers do think it is the practitioner's duty to offer such advice. Before the practitioner's advice on preventive/promotive health and nutrition is more readily accepted, the practitioner will have to learn how to interact within the existing food classification system and be able to give culturally appropriate (food specific) advice about diet during illness. This will demand a greater appreciation that diet is perceived as a counterpart to medicine in managing illness.

Another point which is pertinent, although slightly tangential, emerges from the milk and medicine example forementioned. Going to a practitioner is a learning experience for the villager. The villager listens, watches, and interprets what transpires in the clinical experience in terms of an existing cognitive

framework. Milk is more than a food, it is a substance having multiple associations within this framework. The recommendation to drink milk by a practitioner is interpreted according to other cues pertaining to the perceived nature of the medicine administered. In other instances, the perceived action of a medicine causes the villager to extend, invent, or reinterpret notions of physiology and bodily processes. For example, according to native physiology, many channels, *narambu*, run throughout the body through which blood and wind flow. When talking to villagers about *narambu*, I found that some informants gave me explanations about the structure of *narambu* networks based on their experiences with medicine. For example, informants noted to me that *narambu* were all connected. When I asked how they knew this was so, a common answer received was that an injection was given in the left arm despite where an illness was in the body. Therefore, the medicine must travel through all the *narambu* to get to the location where it was required. Unlike herbal medicine, an injection did not go to the stomach first. It is important to recognize that the clinical experience is a time when explanatory models of physiology and health are invented, reinvented, expanded, and adjusted in the light of existing reason and the perception of experience.

#### PHYSICAL CHARACTERISTICS OF MEDICINE

The form in which a medicine is administered is highly significant to the villager. It is extremely common to hear a village patient specify the form of medicine wanted during a consultation—a feature of the client dominated medical market. This is true not only of injections but mixtures, capsules, and tablets as well as medicines of different colors and occasionally tastes. Let us consider why it is that medicines having different forms are requested at different times.

Injections, as we have already noted, are considered powerful and heating. Like stethoscopes, some villagers have classified injections on the basis of their power (Indian, English, German) the most powerful injection being those manifesting the greatest burning sensation (German injections). Injections are preferred by those who want quick symptomatic relief. For those patients who fear that they may be too weak to withstand the shock of an injection, injection-powered pills (capsules) are sometimes requested. Alternatively, mixtures are desired for infants and those experiencing chronic debility and weakness. This is due to ease in administration as well as the fact that they are considered to be less powerful and "shocking" to the body.

Illness specific preferences also exist in respect to medicine "form" preferences and these preferences are oft-times related to notions of ethnophysiology. For example, injections and pills are preferred for fevers caused by overheating but not for diarrhoea caused by overheating. For diarrhoea, mixtures are preferred because the digestive process is involved and villagers perceive pills as being difficult to digest and injections as being so powerful as to cause diarrhoea as a side effect. In general, pills are thought to be inappropriate for illness involving a lessening of digestive capacity, *ajirna*, including such illnesses as TB where general



debility is linked to a loss of digestive power as well as other etiological factors. This is particularly the case when tablets must be taken over long periods of time. Weakness experienced by a child during an illness in which pills have been administered is sometimes attributed to the interference of the pill with the child's digestive process and not the illness. If tablets cause thirst or a practitioner tells the patient to drink plenty of water with the tablet, the medication is suspected as not only being difficult to digest but being heating.

Liquids are preferred for bloodlessness (anaemia) and weakness because they readily join the blood. Medicine in liquid form is especially preferred by pregnant women who not only feel that injections are too powerful and heating (capable of inducing abortion) but because pills might sit in their stomachs. According to indigenous notions of physiology, the fetus grows in the "stomach pot" and shares the stomach space with food. Some women perceive pills as not only being difficult to digest but causing ill effects for the fetus.

Medicine is also scrutinized in terms of its color in as much as colors are thought to signify a medicine's inherent properties. For example, a black medicine is thought to be powerful as well as being good at reducing *pitta*, an ayurvedic term used in local parlance to designate nausea, dizziness, or yellow urine/body excretions. Black pills are considered appropriate for vomiting, fever and fits but not for digestive disorders, weakness, or bloodlessness. For this reason, black ferrous sulfate tablets are not popular among pregnant women and those experiencing weakness due to anaemia, as both the form and color of this iron supplement are not culturally appropriate. White medicines, particularly liquids, on the other hand might be more culturally appropriate. They are attributed to have a neutral if not a cooling quality, be more easily accepted by the body and are trusted more when initially administered. White pills are generally considered cooling, appropriate for fever, body pain (caused by heat), headache, or a loss of vitality.

Red medicines particularly in pill form are attributed to be heating and good for wet cough and cold while liquid red medicines are thought to be blood producing despite the fact that cooling foods and medicines are generally attributed to be blood producing not heating substances. In this case, notions of color concordance, i.e. red substance and blood, supercede an association of the color red and heat. Yellow medicines are generally thought to be heating and aggravate *pitta* when consumed internally. As a topical medicine, however, yellow ointments are viewed as purification agents. An association is made between yellow and turmeric, a traditional blood and skin purifier used both in the home and for ritual purposes. Burnal, an ointment purchased over the counter, is used for a wide range of skin infections and cuts. Its popularity in large part is derived from its yellow color which villagers associate with turmeric. Here we have an instructive case where the attributes of one medicine are applied to another medicine having similar physical characteristics.

Taste, like the form and color of medicine is also regarded as a sign of a medicine's qualitative charac-

teristics. The tastes, astringent and bitter, are generally regarded as cooling for the body and are thought to have a positive promotive/medicinal value. Herbs having a bitter/astringent taste (like black tea) are labelled *kanir* and commonly used as folk medicines. For example, a number of *kanir* and astringent herbs and shoots of budding trees are used as preventive medicines (*kodi oshadi*) for young children as well as being used as general medicine for stomach aches, fever, and blood impurities. Salty medicines, on the other hand, are viewed suspiciously by villagers and thought harmful for the bones (causing brittleness) if taken for any length of time. Pungent medicines are considered appropriate for cough (as they melt mucus) and as digestive aides, but they are considered inappropriate for skin diseases, urinary tract disorders, or rheumatic complaints.

Combinations of medicines with different physical characteristics administered at the same time are sometimes interpreted as part of the practitioner's strategy to counterbalance the adverse effect of one medicine by another. For example, red tablets issued with white tablets are oft-times interpreted as cooling tablets issued to counterbalance heating tablets. When a combination of tablets are taken but not deemed efficacious, the quality, *guna*, of the medicines are spoken of as being in opposition. In such cases, the colors or tastes of medicine may be scrutinized by villagers in respect to the types of associations thus far described. Ayurvedic and folk practitioners generally take care to explain the medicines they administer in terms of common associations and this increases the "performative efficacy" of the medication as a fit is established between cultural expectations and the therapy administered. This is perhaps one reason why villagers are content to take a longer supply of such medicines home than is the case with cosmopolitan medicine. In the case of cosmopolitan medicine, initial doses of medicine (particularly combinations of medicine) are desired for shorter time frames so that the effects of the medicines can be seen in relation to the constitution of the patient as well as in relation to each other.

## CONCLUSION

At a time when the democratization of primary health care has become an issue of international importance and support, a necessity exists to evaluate how and why the layperson uses alternative sources of therapeutic aid particularly where cosmopolitan therapy is being made more accessible geographically and economically. In a recent paper [9], I argued that general quantitative surveys on the utilization of multiple therapy systems skew the importance of indigenous forms of therapy. To back up this argument, I presented both survey data on illness-specific patterns of resort and personal observations made while sitting in the offices of a cross-section of practitioner types in South Kanara. This data indicated that, among other things, indigenous therapy was preferred for a number of children's illnesses of high public health priority [10]. As Rosenstock [11] has aptly reminded us, however, (in the western context), utilization studies (including illness-specific studies), while being a necessary activity in the formulation of public health policy,



fall short in providing explanations of why services are used. To answer the question why therapy systems are utilized as they are, demographic and economic data are required as well as a consideration of those variables which effect the perception of symptoms, illness, alternative forms of medicine and practitioners.

In this paper, I have focused on perceptions of medicine and tried to illustrate how such perceptions effect health behavior and give us valuable clues into why illness-specific and age-specific patterns of resort in the utilization of multiple therapy systems exist. In terms of future research, the data introduces some issues worth further investigation. It is worth examining what it is about a type of medicine (therapy is a broader issue) which makes it appropriate/inappropriate in the treatment of a particular illness or range of illnesses. This requires investigation into indigenous notions of etiology and ethnophysiology as well as perceptions of medicine. For example, if an illness is thought to be caused by or interfere with the digestive process, the administration of a number of pills thought undigestible may not be viewed as appropriate. It will also be important to study how perceptions of medicine and their effects in the short run (immediate relief) and the long run (overall health) influence health behavior. We have seen, for example, that although cosmopolitan medicine may be seen as demonstratively effective in the short run, it is not always considered beneficial in the long run. Data on what is considered the appropriate form and color of medicine may lead us to a better understanding of why some types of therapy are accepted and others rejected. For example, such data helps us to understand why South Kanarese women do not find black ferrous sulfate tablets an appropriate form of therapy for bloodlessness (anaemia) especially during pregnancy. Moreover, when differences in resort patterns are noted between the general population and more vulnerable segments (such as under threes or pregnant/lactating women), data on the perception of medicine in respect to form, power, and side effects may give us clues as to why, for example, tetanus or triple antigen vaccinations are not popular, despite the paternalistic advice of health auxiliaries and the general popularity of injections in the population at large.

The implications of data on the layperson's perception of medicine for the field of public health are significant. If types of medicine targeted for high risk segments of the population are not being maximized, it is worth investigating whether the characteristics of the medicines employed are deemed inappropriate or whether the system of therapy being supported is deemed inappropriate. For example, if black ferrous sulfate tablets are not popular among pregnant women, it is worth investigating whether an appropriately colored cosmopolitan tonic might be more acceptable [12]. In as much as a number of ayurvedic preparations exist which are rich in iron, it might be worth studying the relative popularity and compliance rates of tonics from alternative therapy systems to see if different acceptance rates are evident.

Public health officials might also benefit from studies on medicine-taking behavior by gaining a better appreciation of "timing" in respect to their efforts to promote preventive health measures. For

example, in South Kanara, it is deemed inappropriate (especially for children) to take helminthicide during monsoon due to notions about the body's increased vulnerability (associated with morbidity/mortality patterns) and the heating properties ascribed to this deworming medicine. Winter is deemed less appropriate for this medication than summer which is considered a good time for therapy. Appreciation of such data would insure a more effective deworming program.

It would be valuable for health planners to pay credence to anthropological data on the perception of medicine and patterns of resort in the utilization of alternative therapy sources, particularly when developing strategies for vulnerable sections of a society. Anthropology can plan an important role in orientating social marketing strategy around key cultural concerns and associations [13]. While I do not think it is the job of anthropologists to pull rabbits out of problematic public health hats, perhaps they can help the hats be fitted onto the right heads.

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## REFERENCES

1. Statements and assumptions about folk health ideology being closely related to ayurvedic ideology have been made at this conference as well as being found in anthropological literature. See, for example: Opler M.E. The cultural definition of illness in village India. *Hum. Org.* 21, 1962.
2. Obeyesekere has written extensively on what he has termed the meta-medical dimension of ayurveda; that is, concepts of the body consonant with a larger metaphysical or cosmological schema. He has also noted that ayurveda is closely affiliated with the Samkya and Nyaya-Vaisesika schools of philosophy. See Obeyesekere G. The impact of ayurvedic ideas on the culture and individual in Sri Lanka. In *Asian Medical Systems: A Comparative Study* (Edited by Leslie C.). University of California Press, 1976; and Illness, culture, and meaning: some comments on the nature of traditional medicine. In *Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and other Societies* (Edited by Kleinman A. et al.). U.S. Government Press, 1975.
3. Leslie C. Pluralism and integration in the Indian and Chinese medical systems. In *Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and other Societies*. *Ibid.*
4. Nichter M. Patterns of curative resort and their significance for health planning in South Asia. *Med. Anthropol. Q.* 2, 1978.
5. Leslie C., *op. cit.*
6. Friedson E. *Profession of Medicine: A Study of the Sociology of Applied Knowledge*. Dodd & Mead, New York, 1970.
7. Nichter M. The joga and maya of the tuluva būta. *East. Anthropol.* 30, 1977.

8. It may be noted that the ingestion of milk soon after a tetracycline injection or capsule greatly reduces the positive activity of the drug. In as much as tetracycline is commonly used in India, a study was undertaken to investigate the extent of milk drinking (as a cultural phenomena) soon after tetracycline medication. Twenty patients prescribed tetracycline were followed up and it was found that 16 (80%) had consumed milk soon after the medication at some point during the course of treatment in an effort to cool the body. It was found unacceptable to advise against milk drinking unless a substitute such as tender coconut water was advised.
9. Nichter M. 1978, *op. cit.*
10. Data collected elsewhere suggests that observations made in South Kanara are not unique. See, for example, People's perception of illness and their use of medical care services in Punjab (Edited by Kakar D. N. *et al.*). *Ind. J. Med. Educ.* XI.
11. Rosenstock I. M. Why people use health services. *Milbank meml Fund Q.* 44, 1966.
12. Nutritional anaemia due to deficiencies in iron, folic acid and Vitamin B<sub>12</sub> are major public health problems in India particularly among pregnant women. It has been estimated 10-30% of the general population and 30% of pregnant women are iron deficient (haemoglobin levels below 10 g%). Prophylactic studies have indicated that if pregnant women ingest 30 mg of ferrous sulfate per day during the last trimester of pregnancy that not only is their haemoglobin level stabilized but that birth weight of infants rise. Needless to say, more appropriate social marketing of ferrous compounds and folic acid would be a worthwhile endeavour as a complement to appropriate nutrition education programs. See Gopalan C., Raghavan K. Vijayan. *Nutrition Atlas of India*. National Institute of Nutrition. Hyderabad, 1971.
13. The ethics of using anthropological data for culturally appropriate social marketing programs, must I think, be considered in context and in respect to the gravity of the health problem involved.

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## BOMOHS, DOCTORS AND SINSEHS—MEDICAL PLURALISM IN MALAYSIA

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**Abstract**—In addition to the official "cosmopolitan" system, a number of different health care systems flourish in Malaysia. This article provides an overview of the current situation of the dominant systems and discusses the multiplicity of use by the multi-ethnic Malaysian population. An examination of the reasons for the persistence of traditional health care systems may provide a perspective from which to evaluate cosmopolitan practices and may indicate that the cosmopolitan system is seen as an incomplete health system. The need and possibilities for collaboration between different health systems are examined in light of specific studies carried out in rural Malaysia.

The official cosmopolitan health care system in Peninsular Malaysia may be considered one of the best in the South East Asian region; the ready availability of rural health centers to villagers has been praised often [1]. Despite this, other systems coexist and are widely used as alternatives, and in addition to the cosmopolitan health care system.

The Malaysian situation, in which different health care systems coexist but do not usually cooperate is similar to, but more pronounced than, that of most other countries and is a clear example of medical pluralism. Currently there is not much contact between the various systems but some communication has lately taken place between the various traditional systems [2] (Federation of Associations of Traditional Medicine has been formed) and sporadic contact has occurred between the cosmopolitan and traditional Chinese systems. Though there is some cross-system borrowing by individual practitioners the formation of a new syncretic health care system seems unlikely.

An attempt is made in this article to present an overview of the current situation of medical pluralism in Malaysia (with only brief references to specific studies, dealt with in more detail elsewhere), to probe the implications of the persistence of traditional medicine and to point to some of the factors which might influence future health care developments and alter the present situation of medical pluralism in Malaysia.

Whether cooperation or even contact between the various systems will increase in the near future is uncertain, as is the further incorporation into the offi-

cial national health care system of traditional practitioners, or folk healers, other than the traditional Malay midwives (*bidan*) who already work jointly with the government cosmopolitan-trained midwives [3–5]. Changes in degree of recognition and of seriousness in which traditional medicine is discussed not only by the general public but by people within the official national health system, however, can be noted. It is probable that the recent world-wide attention and credence given to traditional medicine in China [6] and the pronouncements of the World Health Organization, urging member nations to incorporate traditional healers into their national health systems wherever feasible, have influenced this change of attitude [7]. These recent international events have provided a legitimacy to traditional practice not enjoyed in the recent past when, all too often, traditional medicine was thought of as "unscientific quackery", representing remnants of a "backward" ("traditional"—used pejoratively) colonial past.

This international influence is coupled with developments within Malaysia, some of which are similar to those of other post-colonial third world countries: on the one hand there is a concern for being an equal partner in the world community, for being "modern", scientific, developing and industrializing (being "Western!"), and on the other is a resurgent feeling of nationalism, with anti-colonial and even anti-Western implications, and a desire to develop and depend on what is truly and uniquely Malaysian. Though considered a Third World developing country, Malaysia is relatively rich with multiple natural resources. Rubber, tin, palm oil and petroleum production provide a sizeable income. The skyline of Kuala Lumpur, the capital, is almost unrecognizable from that of 5 years ago—the building trade is booming and traffic jams are increasing. Malaysia is a nation "on the move" in rural as well as urban areas. The signs of "development" are everywhere. Social, economic and cultural changes are occurring and it will be interesting to observe how these changes effect the structures of health care resources in Malaysia.

It is quite clear, and nothing new, that health care cannot be considered in a vacuum, but that social,

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cultural and political factors are of direct concern. Leslie has stated that "medical systems of complex societies are at least as complex as the social systems and cultures of which they are a part" [8]. Thus, to mention but a few considerations, medical pluralism in Malaysia must be understood in terms of international factors (as mentioned) and, nationally, in terms of the dialectic between "Western" development/modernization and nationalism: taking pride, and finding relevance, in a rejuvenation of a traditional past. It must also be understood in terms of the process of legitimization, including the establishment of professional associations, attention given by national organizations and through consistent popular usage, of different health care resources; further, it cannot escape the question of ethnic relations.

While recognizing that many types of health care resources exist in Malaysia and that the major health care systems contain internal variations, the following discussion will be limited to the four leading systems: the cosmopolitan, or official, national, health care system, the two regional traditional health care systems—Ayurvedic and Chinese—and the local Malay, folk, medical "system" [9]. Specific examples will focus on multiple use of the traditional Malay and cosmopolitan systems.

Peninsular Malaysia's population of 12 million is heterogeneous—roughly composed of 50% Malays, 35% Chinese, 10% Indians and 5% others (including Europeans, Eurasians and *Orang Asli* aborigines).

Most Indians are Tamils but there is also a substantial number of Sikhs and Bengalis. The Chinese represent nine major language groups of which Hokkien, Hakka and Cantonese are the largest. 70,000 semi-nomadic *Orang Asli* in and on the edge of the jungle represent culturally distinct subgroups that have their own medical system in addition to the one provided by the government.

The Malaysian population, despite a fair amount of social interaction between the major groups and despite official efforts to bring about unity, may be seen as a mosaic—an ethnically pluralistic society. The segmentation is reinforced by religious beliefs—Islam, Buddhism and Hinduism—which are largely drawn along ethnic lines.

Speaking of India, Leslie has pointed out that "professionalized indigenous medicine is not in practice isolated from cosmopolitan medicine" [10]. This is also, to a certain extent, true in Malaysia where different health care systems are interrelated through being part and parcel of a general Malaysian cultural and social situation. The relationships between the various systems in Malaysia, however, are not anywhere as closely linked as the Chinese and cosmopolitan systems are in China, nor as close as the relationship between Ayurvedic, Yunani, homoeopathy and cosmopolitan systems seems to be in India.

Traditional Chinese medicine is part of the social and cultural situation of Chinese Malaysians, including the Chinese cosmopolitan physicians (and there are sons of *sinsehs*—traditional Chinese practitioners—who have become cosmopolitan physicians), and the cultural situation of the Indian systems similarly include cosmopolitan Indian Malaysian physicians and the same is true for Malay Malaysians. But this does not necessarily mean that a cosmopolitan phys-

ician of one ethnic group will be similarly linked with the traditional system of another ethnic group.

As has been pointed out, there exists a limited blend of Chinese and cosmopolitan practices—for example, a few cosmopolitan physicians are now using acupuncture. But although there is a "softening" in the attitudes of cosmopolitan practitioners, with a number willing to consider the value of non-cosmopolitan systems (regional as well as local, folk), most still tend to keep their distance from these other systems and one is inclined to believe that many look at them with disdain [11]. From the public point of view, however, there are explicit cross-systems dependencies (but primarily between the cosmopolitan and the traditional system of the patient's own ethnic group) and one reason for this, especially as the cosmopolitan system may be seen as a partial health care system, is that patients seek in one system what they cannot find in another.

The Chinese population is predominantly urban and thus all levels of cosmopolitan services are easily available to it. Before 1950, however, the Chinese relied primarily on traditional Chinese practitioners, the *sinsehs*. Though during the last 30 years there was a shift to cosmopolitan medicine, the Chinese still make extensive use of the services of more than 1000 *sinsehs* in Peninsular Malaysia, half of whom are members of the Chinese Physicians Associations. Most members of the association have graduated from recognized training institutes in Kuala Lumpur and Singapore [12].

The Chinese Medical Training Institute of Malaysia, founded in 1955, offering a 4 year course, has graduated over 200 *sinsehs*. Instruction includes Western medical theory and therapeutic aspects of Western medicine and is thus unique in Malaysia in offering a blend of two medical systems. For the past 10 years, the Tong Shin Hospital in Kuala Lumpur has employed both cosmopolitan and traditional Chinese practitioners [13–14].

A recent study indicates that Chinese practitioners see some 200,000 patients each month, many of them non-Chinese. The main problems attended to are gynecological and rheumatism, gastritis, bronchitis and emphysema. Often cosmopolitan medicine is used first and Chinese practitioners are a second recourse but this order of usage is by no means universal [15].

In addition to the *sinsehs*, temple mediums, astrologers and palmists perform what is believed to be a great variety of health promoting activities. Patients can even obtain diagnosis of and prescriptions for ailments in the Chinese temples by throwing Yarrow "fortune" sticks in front of the altar of a particular god or goddess. There are over 1000 Chinese medical halls or herbal medical shops in the country that provide not only herbal and root medicines but medical advice to their Chinese as well as to Malay and Indian customers. A number of Chinese also seek out traditional Malay and sometimes even *Orang Asli* practitioners as well as the few existing Indian Ayurvedic and homeopathic establishments.

The Indian population is both urban and rural. Indians in the rural areas are largely employed as rubber and palm oil estate workers whereas in urban areas Indians represent a variety of "professional" and

"nonprofessional" groups. Cosmopolitan services are available to Indians in the cities and in rural and estate clinics, but traditional Indian practitioners are consulted as well.

Relatively little is known of Indian medicine in Malaysia; the chief source of information is the preliminary work by Colley [16]. The Malaysian Homeo-Ayurveda-Siddha Physicians Association (HASPA) was formed in 1972 and comprises over 100 members. Members are required to pass an examination by a board that ascertains their competency. These physicians practice largely in urban areas (Kuala Lumpur, Penang, Muar and Ipoh). A number of traditional Indian physicians practice in the rural areas but are usually only proficient ("specialist") in the cure of a limited number of specific ailments. In the rural areas they sometimes practice a combination of homeopathy, Ayurvedic and Siddha medicine; in the urban areas, the practitioners, having a more formal training, operate more strictly within the paradigms of a specific system.

Patients seek the assistance of Indian practitioners for such minor and chronic illnesses as rheumatism, asthma, diabetes, piles, skin disease, and others. Some of these physicians only charge the patients if the treatment was successful. A great variety of Indian (Ayurvedic) medicines—usually imported from the state of Kerala in India—can be purchased in sundry, as well as in specialty, shops and is used by Indians and others for self-treatment.

In addition to physicians, some Brahmin priests provide Hindu "temple healing" in the form of spiritual counseling for psychological problems. The *pujaris*, or temple keepers, sometimes also act as diviners, exorcists, spirit mediums and curers especially for charms and such afflictions as the "evil eye." Astrologers and palmists are frequently consulted, and the teaching and practice of Yoga by Indians and non-Indians alike should not be overlooked for both its preventive and curative effects through promotion of physical, mental and spiritual well-being.

Eighty percent of the politically dominant Malay segment of the population is rural. Thus, it may be considered logical that traditional Malay "folk" medicine is as widely practised and utilized by Malays as indeed it is since rural populations tend to be more "traditional" and more isolated from cosmopolitan services than urban dwellers. However, the government health centers are within easy reach of most of the rural population and are equally heavily utilized, and there are many traditional Malay folk healers, or *bomohs*, with flourishing practices in the bigger cities (Press has argued that one of the reasons for the persistence of folk medicine in urban areas is that it minimizes the trauma of acculturation of recent rural migrants [17]). A recent study by the Ministry of Health found that only 12% of the rural population live more than 3 miles from a government health centre providing curative cosmopolitan services [18]. Between 1955 and 1975, 73 main health centers, 246 health subcenters and 1,293 midwife clinics were established in rural Peninsular Malaysia [19].

It is estimated that there are 2000 full-time *bomohs* (about equal to the number of cosmopolitan physicians in government service) and more than 20,000

part-time *bomohs* in Peninsular Malaysia [20]. Unlike the Chinese *sinsehs* and some of the Indian practitioners representing the formal regional systems, there is very little standardization in the training of these local healers. A few old texts (or *Kitab Tib*; e.g. *Taj-ul-Muluk* and *Kitab Muja'vabat Melayu*) are sometimes used, but knowledge is generally passed down from father (*bomoh*) to son or from master to student. One may also become a *bomoh* by means of visionary dreams, "encounters" with spiritual beings or through the acquisition of helping, familiar, spirits (*hantu raya*, *pelisit*; *polong*; *akuan*; *bajang et al.*) which are carefully fed and attended to in order to maintain their loyalty and assistance. *Bomohs* may be grouped into herbalists, spiritualists (who heal by using short or lengthy ritualistic incantations) and bone-setters; but these categorizations are not always exclusive as most *bomohs* belong to more than one category. Most *bomohs* are specialists in treating specific complaints and some, although generalists, are known to be especially effective in treating particular ailments. A few well-known *bomohs* are sought out by Malays and others from all parts of the country for a great variety of physical, psychological and spiritual problems.

After a meeting of 100 *bomohs* with four cabinet ministers in 1977, a committee was formed to establish the Malaysian Association of Traditional Malay Medicine [21]. In May, 1979, this committee convened a 2-day Conference on Traditional Medicine at the University of Malaya in Kuala Lumpur, bringing together traditional Chinese and Indian practitioners, and Malay folk healers. Following the conference, approximately 60 *bomohs* from various parts of the country ratified the constitution and elected the officers for the now established, but not yet formally registered, association—*Persatuan Perubatan Tradisional Melayu Malaysia* [22].

The establishment of a formal association, with officers, a constitution and closed membership, may be seen as a process of legitimization of traditional Malay medicine [23]. The main organizer for the formation of this association is the anti-drug addiction officer of UMNO, the leading Malaysian political party. Though he is not a *bomoh* he is now the new president of the association (!?). He has long petitioned the government to recognize the value of *bomohs*, especially those treating drug addicts, and has pointed out that *bomohs* are inherent to Malaysian culture and that there is a need to adhere to truly Malaysian, rather than Western, solutions to the problems of drug addiction (which he sees as a Western illness) and to health care in general. He has also carried on a publicity campaign being successful in getting various newspapers to write repeated articles on the treatment of drug addicts by *bomohs*. One may speculate that political considerations was a major reason for the surprisingly heavy participation of traditional Chinese and Ayurvedic physicians (representing formal regional health care systems) in a conference essentially organized by the *bomoh* association (representing a local folk health care system). Discussions between representatives of the various traditional systems to form the Malaysian Federation of Associations of Traditional Medicine were also held at the instigation of the "*bomoh* association".

The Association of Traditional Malay Medicine Sellers (PUBRA) with some 400 members, has been in existence since 1976, but is as yet unable to provide an accurate description of its members and their products. Many members are itinerant herbal and root sellers; some also peddle patent medicines; some put on "medicine shows"—which may be seen as a form of public entertainment or "street theatre" but should not be confused with *wayang kulit*, *main putri* or the possession trances (*main berjin* or *main berhantu*) used by some of the folk healers [24]—during which large crowds gather to enjoy the sellers' ingenious, and often ribald, attempts of attracting customers and demonstrating the potency of their wares. Many, but not all, members of PUBRA are also bomohs.

The recently established Division of Documentation of Traditional Medicine at the National Museum to document the practices and recipes of traditional Malay and Orang Asli medicine may go a long way toward presenting a current collected overview of such practices and health care knowledge. By publically deeming Malay folk medicine important enough for the establishment of the Division, and through its collected work, traditional Malay medicine is further legitimized.

Unlike the case of the traditional Chinese and, to a lesser extent, Indian practitioners, and largely because of the lack of standardization, the government and, more strongly, the Malaysian Medical Association, have been against any form of official recognition of the bomohs. Difficult as it may be, the new bomoh association will no doubt attempt to implement certain standards which might cause more favorable reactions. As a number of bomohs have begun treating drug addicts [23, 24], formal recognition of bomohs might be achieved if restricted to dealing with this growing problem in Malaysia.

Most bomohs have an extensive knowledge of herbal cures and the majority will use Koranic and other incantations (*jampi-mentra*) as part of their healing ceremonies. Some have called the bomoh a combination of shaman, herbalist, diviner, curer and psychiatrist [27].

There is a prevailing supernatural basis to bomoh treatment [28], and most, if not all, bomohs have a spirit helper assisting in the treatment, but the use of helping spirits, so much a prominent feature of the armamentarium of the bomohs of the past, is now more covert. Most bomohs are guarded in their discussion of helping spirits, as, strictly speaking, dealing with such spirits is against Islam, and it may be said that Islam is now more of a presence in rural communities than previously and, consequently, pre/non-Islamic beliefs, though still remnant, have tarnished. But whether or not most bomohs still actively, or openly, use helping familiar spirits, such as those mentioned above, or a spiritual "princess" (*puteri*) who facilitates diagnosis and treatment, most bomohs will readily admit that they themselves are but instruments of healing and they publically attribute the real healing power not to spirits, which may or may not be used, but to Allah.

Even when the chief means of treatment "seems to be" herbal there is a spiritual or supernatural emphasis. It is claimed by most bomohs that unless a

medicinal concoction has been "empowered" by a special benediction—a *jampi* or incantation, often blending Islamic and pre-Islamic elements (just as communication often occur with both helping spirits and with Allah, or a messenger from Allah)—it will have little effect. Of course, there are bomohs who deal in charms, who use helping spirits to cause others to be "possessed," and there are those who go into deep trance as part of the healing ritual, but it must be remembered also that most bomohs are Muslims who take their religion seriously.

Medical pluralism in Malaysia may best be viewed through specific examples. The following will deal mainly with the multiple usage of cosmopolitan and traditional Malay medicine by Malays, but other studies among Chinese and Indians similarly provide evidence of medical pluralism.

In a study [29] of a hundred patients of a well-known bomoh in north west Malaysia it was found that, except for ethnicity (which was predominantly Malay), those consulting a bomoh cannot be distinguished from the population at large. The complaints presented covered a wide variety of physical and psychological problems as well as those thought to be due to charms, spirit possession and the like. Consulting the bomoh was further found not to inhibit use of cosmopolitan practitioners, whether the complaint was physical or psychological.

Forty-three percent of those who came to the bomoh had already been to at least one other source of healing, primarily cosmopolitan practitioners, though a number had also consulted another bomoh. Eighteen percent had tried a variety of resources. Most of those who had also sought help from a cosmopolitan practitioner had a physical complaint for which they felt they had not been properly treated. More people with physical complaints tend to go to cosmopolitan practitioners first than do those with psychological or "traditional" ailments, that is, charm, spirit possession and the like. This order is no doubt influenced by the small number of psychiatrists in the country and thus, according to members of the Department of Psychological Medicine at the University of Malaya, "there is little question but that the bomoh constitute the largest group of healers who aid and comfort patients with mild mental illness" [30].

This study, and others, indicates that bomohs are consulted for a wide variety of physical, spiritual, social as well as psychological ailments. Concomitantly, we should recognize that, as with most traditional healing systems, the Malay system does not categorize an illness into either a physical or a psychological complaint to the extent done by cosmopolitan medicine but rather tends to treat the whole body-mind-spirit complex [31, 32].

Colson [33], in a study among Malay villagers in central Malaysia (state of Pahang), concluded that differential use of health resources was related to perception of etiology and to the degree of functional impairment. Those with a higher degree of functional impairment were found to be more inclined to use bomoh rather than clinic treatment. Though not discussed by Colson, one may wonder if the degree of functional impairment cannot also be related to etiological perception—that the higher the degree of the functional impairment the greater the likelihood that

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the etiology of the complaint is perceived as supernatural and not natural.

Others, elsewhere, have also advocated that the choice of practitioner depends on etiological perception and our study partially supports that claim. It was found that most physical problems are thought to have a simple and natural cause, and are therefore often brought to a cosmopolitan practitioner for treatment. Should the problem persist, however, the etiology of the problem is usually reconsidered and a supernatural cause is deemed likely (or the illness could be felt to be a result of breaking a rule of custom, *adat*, or caused by ethical misconduct) and thus bomoh treatment is felt to be most appropriate. Frequently it was found that the bomoh and a cosmopolitan practitioner are consulted to treat (different aspects of) the same problem. The bomoh would frequently tell some of his patients that though he could deal with certain aspects of the problem, they would be well-advised also to "go to the hospital".

Such duplicity of use might simply be a matter of wanting to try all possibilities for eventuating a cure—to "cover all bets"—but it might equally well reflect a concern of most Malaysians for the "why", as well as for the "how", of any but the most minor and transient ailments. Most Malaysians are quite cognizant of the germ theory of disease, but understanding "how" an illness occurs still does not explain to them "why" this illness should happen to this particular person at this particular time. As has been reported repeatedly from other countries, the question "why" is often as important, or more so, than the question "how". In this light, we may say that Malaysians have dual (or even plural) etiological explanations for the occurrence of any one illness—the cause(s) is (are) seen to be *both* natural (dealing with the "how") and supernatural (dealing with the "why"). Unlike cosmopolitan practitioners, most traditional Malay practitioners relate their healing to both the "how" and to the "why".

The study confirmed that the longer a problem had persisted, the greater the number and the variety of healers consulted: 49% of the multiple users had had their problem for more than two months whereas only 27% of those who had only consulted the bomoh had had their current problem for that length of time. This supports the hypothesis that Malaysians with chronic, long-lasting illnesses are particularly prone to move frequently and easily from one system to another and do so as a rule rather than as an exception [34, 35].

This multiplicity of use was found to be related not only to etiological duality (or reconsideration) but to the fact that villagers have come to expect a rapid, almost miraculous cure, from cosmopolitan medicine. If this does not occur, patients may well feel they have been improperly treated and they will seek help elsewhere.

Many patients we interviewed pointed out they consulted the bomoh because, unlike cosmopolitan practitioners, he did not neglect the affective side of healing. The statement of one patient, that villagers are reluctant to go to hospitals "because of the rough and ungently way they are treated by nurses and doctors who sometimes made them feel worse than did the illness for which they had come", is not unique. In

addition to once again confirming the practice of medical pluralism in Malaysia, this study showed that it is difficult to make general conclusive statements about specific prerequisites for the use of one rather than another (or many) type(s) of treatment modality. As many examples can be found to break as well as to make the rule.

In a second (pilot) study, examining the perception of Malaysian physicians regarding rural health care and traditional medicine, it was surprisingly found that three-quarters of the physician respondents (admittedly only 23%,  $N = 98$ , of those contacted (426) by mail responded and thus the findings cannot be seen as fully representative of all physicians) felt that it might sometimes be of value for a patient to see a bomoh and two-thirds stated that traditional Malay practitioners are of definite value in dealing with psychosomatic illnesses. Most interestingly, more than half of the responding physicians stated they would consider suggesting that the patient consult a bomoh in instances where the physician's treatment was not effective. Though there is a strong resistance to any official recognition of the folk healers, it would seem that not all cosmopolitan physicians hold their traditional counterparts, even when these are local folk healers, with the degree of "contemptuous repudiation" usually assumed [36].

A third study [37], of Hospital Assistants (HAs), paramedics who constitute the backbone of the government's rural curative services (and hold other assignments elsewhere), indicated that not only do HAs recognize that villagers still rely on the bomohs either in addition to, or instead of, the HAs' services but almost 90% of the respondents felt that a closer contact between bomohs and cosmopolitan practitioners would be of benefit to their patients. Twelve percent definitely felt that bomohs could help a patient in ways they or physicians could not and an additional 74% felt that this might be true in certain cases.

This positive response should not be interpreted to mean HAs necessarily feel bomohs are better qualified practitioners or that they can treat all complaints, but it does indicate both a recognition of the practice of medical pluralism on the part of their patients and a willingness to cooperate with other systems in order to maximize the benefits and minimize the dangers of such medical pluralism.

The preliminary results of a fourth (illness episode) study, involving 26 households carried out over a 19 week period in a village in northwestern Peninsular Malaysia, clearly and not surprisingly, indicated that households make use of a variety of health care resources, either in combination or at different times (for the same and) for different illnesses. This was as true for the teacher living in the village as for those who had never attended school.

The village is less than two miles on good roads from two rural government health centers each staffed by a Hospital Assistant (with two and half years of specialized training in addition to his 11 years of schooling) and a physician visiting once a week. There is also a government midwifery clinic in the village with a trained midwife (who cooperates with the traditional village midwives—*bidan*). A district hospital is located 20 miles away and is easily accessible by



road with bus and taxi transport. A few private physicians are located within 13 miles of the village. Yet, with this seeming wealth of cosmopolitan health care services, there are 21 practising bomohs and two traditional midwives (bidan) in this population of 3000 Malays (and the members of one Indian and three Chinese families). The bomohs have a variety of specialties; though a number treat only a few patients each month, others receive a great number of patients from the immediate area and beyond.

In addition to the traditional Malay practitioners and the various cosmopolitan health care resources, including patent medicines sold in the village stores and by itinerant medicine peddlers, some villagers will go to the sinsehs in the nearest town and a number of others will buy medicines for self-treatment from the Chinese medicinal shops. A number of the village bomohs are known to incorporate medicines of Indian Ayurvedic origin in some of their treatment recipes. As elsewhere, the villagers also rely on their own substantial knowledge of traditional, folk and cosmopolitan healing procedures.

During the 19 weeks, 18 of the 26 households studied had presented at least one illness for treatment to a bomoh (living either in the village itself or outside it), 20 households had made use of the government health care services (clinic, government physician or hospital), 15 had visited a private physician, 25 households reported the practice of self-treatment with the help of patent medicines bought at the local stores and 13 households had used herbal medicines, massage, incantations and other more traditional procedures in their self-healing efforts. 22 households reported illness episodes for which no treatment was given.

Of the 20 illness categories listed for the households during the study period, the cure for such symptoms as stomachache, headache, eye-trouble and fever was variously sought from all 5 of the following health

care resources: (1) bomoh, (2) government health care services, (3) private physician, (4) patent medicine self-treatment and (5) traditional means of self-treatment. Relief from another 10 of the 20 illness categories was sought from 4 of the different health care resources. This, and the data from the first study mentioned, seem to contradict Colson's statement that "the clinic is visited for minor complaints that would receive no attention other than self-treatment if no clinic were available" [38]. It is clear that bomohs are consulted for relief of minor (and major) complaints even where clinics are available (see Table 1).

It is pertinent to note that for asthma, severe boils and particularly for fractures, bomohs, reportedly are heavily relied upon. Though some had used a private physician and had tried self-treatment, no-one had used the government services for rheumatism, asthma or fractures. Conversely, no one had used the services of a bomoh for the cure of a cold, cough, cuts, worms and diarrhea for which cosmopolitan medicine is recognized as particularly effective. Though a tendency may be seen for the use of one type of health care resource for certain illnesses and not for others, there are always exceptions and, again no general rule can be made. Plurality of use, however, is constantly the case (see Table 1).

It is clear, cosmopolitan health care services are frequently used not only by Malays but by all the major Malaysian population groups, yet they also use their traditional ethnic health care services. Many researchers have asked why traditional medical systems persist when cosmopolitan medicine is so easily available and its curative capabilities so readily recognized? Many answers have been proposed, and the following are but reconfirmation of the importance of some of these which seemingly once again need restating as resultant changes in the cosmopolitan system have not been particularly evident.

First, the perception of the ready availability or

Table 1. Frequency of multiple health care resource utilization for 190\* self-reported illness episodes involving 20 illness categories reported by 26 households in Kampong Singkir, Kedah, Malaysia over a 19-week period

Illness category	Health resources utilized					No treatment	Total
	Bomoh	Government services	Priv. physician	Self-treatment cosmopolitan	Self-treatment traditional		
	(12)†	(14)	(15)	(16)	(15)	(13)	
1. Cough/sore throat	—	5	5	5	1	5	21
2. Stomachache	2	2	3	3	2	1	13
3. Headache	2	4	1	5	2	4	18
4. Rheumatism	2	—	3	1	2	3	11
5. Cuts and sores	—	2	1	4	3	1	11
6. Cold/flu	—	2	1	6	2	3	14
7. Eye trouble	3	3	4	4	1	4	19
8. "Kayah"—severe sores	4	4	2	—	1	1	12
9. Psych. problems	2	1	—	1	4	1	9
10. Chest pain	1	—	—	—	—	—	1
11. Fever	2	7	6	16	1	3	35
12. Measles	1	2	—	1	1	—	5
13. "Barah" (Tumor)	3	1	1	1	—	—	6
14. Mumps	—	—	—	—	1	—	1
15. Toothache	—	2	—	—	—	—	2
16. Asthma	3	—	1	1	—	—	5
17. Fractures	7	—	1	2	1	2	13
18. Skin disease	—	—	1	6	1	4	12
19. Worms	—	3	2	1	—	—	6
20. Diarrhoea	—	5	1	2	2	2	12
Total	32	43	33	59	25	34	226

\* The total of 226—rather than 190 (the number of illness episodes)—is due to the use of more than one health care resource for some illnesses.

† Number in ( ) indicates number of illnesses for which the health care resource was utilized.

accessibility of cosmopolitan medicine should be examined. True, clinics and hospitals are located near most villages but their use is influenced by more than geographic proximity. Though villagers are thought of as unhurried and patient people with plenty of time on their hands, this is not always true. The length of time patients have to wait in a clinic or hospital without knowing how long it will take or what is going to happen to them, takes its toll.

Hospitals and clinics often constitute an alien world to villagers which they cannot easily understand nor negotiate with. As in most countries, Malaysian villagers see hospitals as places where people go to die, or where they are treated without human warmth and given over to powers beyond their control in a world they do not understand [37]. The uses of cosmopolitan medicine may therefore be inhibited by the fact that most Malaysians feel that the proximity, concern and comfort of family and friends are particularly needed at the time of sickness when the patient feels most isolated.

Cosmopolitan medicines may command respect but there is a reluctance to seek them if it precludes the opportunity to talk fully about one's disease and, more importantly, about the illness in a way and in a language familiar to the patient. Another factor inhibiting the use of cosmopolitan medicine is related to the separation of disease and illness [40].

Lately cosmopolitan medicine has tended to deal exclusively with disease at the expense of the more affective side of healing—at worst, hospitals have become what Mahler, the Director-General of the World Health Organization, has called "disease palaces" [41]—increasingly cosmopolitan medicine is accused of being a partial and incomplete healing process. Kleinman *et al.* concur that "present patient dissatisfaction with modern clinical practice suggests that doctors inadequately treat illness" [42]. Engel, among others, has called for a new medical model [43].

In view of the holistic needs, it is baffling that a vast number of people expect from the cosmopolitan system biomedical solutions to almost every kind of ailment or human problem. This is especially true in developed countries where alternative health care resources have only lately "surfaced", though they have been there all along. Westerners have long been indoctrinated to believe that all problems can be solved, technically, by Science [44]. Wildavsky has recently stated that "it is not that cosmopolitan medicine is good for nothing, only that it is not good for everything" [45]. Most traditional healing systems offer the philosophy that psychological, social and spiritual aspects of healing are as important as the physical (biochemical) ones and that feeling well is as important as being free of disease.

Some have argued that in healing, the system of meaning, the structure of the healing process itself, is as important as any pharmacological medication [46-48]. Others have argued that the placebo effect is 60% as potent as the active medications used and that the act of medication is often more important than the medications themselves [49]. "The construction of symbols of healing constitutes healing" [50].

There is some scientific evidence of mind and body inseparably contributing to the healing process [51].

The hypothalamus, which operates both as a neural and as an endocrine organ, is seen as a key to this non-dichotomized perception of the human organism [52, 53].

A cosmopolitan medical clinic or hospital which operates on a set of cultural assumptions different from that of its village patients might implicitly, though unwittingly, challenge their world view without being able to replace it. "Cosmopolitan medicine [though provided by Malaysians themselves] might reflect a too Western approach sometimes alien to patients elsewhere" [54]. The prevalence of traditional medicine may reflect the prevalence of a different world view to that of the urban oriented cosmopolitan health practitioners [55-59].

Treatment provided by a traditional medical system may be particularly effective not only because of the efficacy of the medications used (as judged from a cosmopolitan scientific point of view) but because of the character of the treatment itself. The method of treatment may be particularly compatible with the patient's set of meaningful symbols and because of this its healing potential may be especially potent [60].

A critique of cosmopolitan practice, particularly when using the perspective of traditional practice to facilitate the critique, does not deny the tremendous achievements of cosmopolitan medicine and the benefits derived from its use. But because cosmopolitan medicine has forfeited the affective and social aspects of healing which were part of its heritage, emphasized by Hippocrates [61], and reemphasized by Virchow [62] and recent cosmopolitan practitioners [63] patients are often inhibited from taking advantage of its undeniable positive capabilities and for the same reason are prompted to rely on other practices, some of whose effectiveness can be questioned [64].

In our fervour to point out the so-called holistic aspects and efficacy of traditional practice, we should not lose sight of the fact that there are vast differences between the various systems labelled traditional as, e.g. between local and regional traditional systems referred to above. Though certain generalizations are valid in making comparisons with the cosmopolitan system, such generalizations must be made with care and should be qualified.

We also need to be reminded that the term "traditional medicine" does not imply that systems so designated are stagnant replicas of those occurring a thousand years ago. Dunn [65] emphasizes for example "that Malaysian Chinese medicine today, although firmly rooted in tradition, is also a modern, innovative, changing system". Each system, and the interrelationship of systems, reflect the contemporary milieu in which they function.

Westerners all too frequently tend to think in either-or categories and to imagine, for example, that if someone uses cosmopolitan medicine then he cannot therefore also believe in and use traditional medicine. But people can, and people do [66]. This is true not only in Malaysia but in the United States [67]. Seeming contradictions are not necessarily what they appear, or at least, if they are contradictions they coexist without dire consequences—or mental traumas. Syncretism is not the inevitable result of such coexistence. Bachtar's comment on re-

ligious pluralism may also be pertinent for medical pluralism:

A person may be "an adherent of a variety of belief systems which are not necessarily related to each other except for the fact that he believes them all. This is not what is properly called religious syncretism. The man has very likely never given a thought to the question as to how these conflicting beliefs could be integrated, or for that matter, that they are in conflict with each other" [68].

In the face of multiple health care resources one may raise the question, as many have done (69-74), whether or not there need to be greater contact between the various systems. Is there a need for greater general knowledge of the healing procedures performed within the various systems? It has been argued that this would be especially pertinent for patients who try many resources for the same illness, as both the patient and the practitioner will then be fully aware of the type of treatments given and can capitalize on the beneficial aspects and prevent potentially negative consequences of such multiple usage.

It may be assumed that the medical systems now existing in Malaysia will persist and certain signs show traditional medical practices to be gaining in recognition. The creation of an association of traditional Malay medicine may be assumed to signal changes within that system as well as in how that system will be perceived by others. Apart from whatever contact may take place between cosmopolitan and the traditional systems, there are indications that changes may be expected within the national health care system itself, with greater emphasis on rural health care, the use of auxiliary personnel and a team approach to primary health care services. International and national developments point to a closer rather than a more distant relationship between the various systems.

The existence of medical pluralism shows that no one system holds a monopoly on healing as various systems may be seen efficacious in dealing with the relief and cure of illnesses. Whether or not the recognition of this efficacy will eventually mean the establishment of a new syncretic medical system or full-fledged recognition of, and cooperation between, various systems remains to be seen.

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#### REFERENCES

- Heggenhougen H. K. Hospital assistants in Malaysian rural health care. *Med. J. Malaysia* 33, 165, 1978.
- Heggenhougen H. K. Meeting of Malaysian traditional healers. *Med. Anthropol. Newsl.* Aug., 1979.
- Chen P. C. Y. Incorporating the traditional birth attendant into the health team: the Malaysian example. *Trop. geogr. Med.* 29, 192, 1977.
- Chen P. C. Y. An assessment of the training of the traditional birth attendant of rural Malaysia. *Med. J. Malaysia* 31, 93, 1976.
- Chen P. C. Y. The Malay traditional birth attendant. *Ethnomedizin* 3, 335, 1957.
- Articles on the health care situation in China, with special reference to the mix of traditional and cosmopolitan systems, have been plentiful, especially since the beginning of the 1970s. The Fogarty International Center of the United States Department of Health, Education and Welfare, has published a number of works including:
  - Chen J. Y. P. Acupuncture Anesthesia in the People's Republic of China. 1973 DHEW Pub. No. (NIH) 75-769, Washington D.C., 1975;
  - Kleinman A. et al. (Eds) Medicine in Chinese Cultures. DHEW Pub. No. (NIH) 75-653, Washington D.C., 1975.
  - Quinn J. R. (Ed.) China Medicine as we saw it. DHEW Pub. No. (NIH) 75-684, Washington D.C., 1974.
  - Quinn J. R. (Ed.) Medicine and Public Health in the People's Republic of China. DHEW Pub. No. (NIH) 72-67, Washington D.C., 1972. The Center has also translated and published the Chinese Barefoot Doctor's Manual which explains treatment in terms of both cosmopolitan and traditional medicine, and contains more than 150 pages of description of medicinal plants. Of the many others who have written on this subject, one might mention:
    - Sidel V. and Sidel R. The delivery of medical care in China. *Scient. Am.* 230, 19, 1974.
    - Sidel V. and Sidel R. *Serve the People: Observations on Medicine in the People's Republic of China.* J. Macy Jr Foundation, New York, 1973.
    - Horn J. S. *Away with All Pests.* Monthly Review Press, New York, 1969.
- See, e.g.:
  - World Health Organization. Traditional medicine—views from the South East Asia region. *WHO Chron.* 31, 47, 1977.
  - World Health Organization. Twenty-ninth World Health Assembly—1. *WHO Chron.* 30, 259, 1976.
  - World Health Organization. Training and utilization of traditional healers and their collaboration with health care delivery systems. *Fifty-seventh Session, Provisional Agenda Item 17*, Geneva, 1975.
- Leslie C. M. Pluralism and integration in the Indian and Chinese medical systems. In *Culture, Disease, and Healing—Studies in Medical Anthropology* (Edited by Landy D.), pp. 511-517. MacMillan, New York, 1977.
  - Both Rudolph Virchow (*Ackerknecht*, E. Rudolph Virchow, Univ. of Wisconsin, Wisconsin, 1953) and Benjamin Rush (Rosen G. Benjamin Rush on health and the American Revolution. *Am. J. publ. Hlth.* 66, 397, 1976) were early proponents of the inter-relationship of social, cultural, economic and political factors and health. Among contemporary students of health care systems Navarro has been forceful in this regard (i.e. The industrialization of fetishism or the fetishism industrialization: a critique of Ivan Illich. *Soc. Sci. Med.* 9, 351, 1975; The underdevelopment of health or the health of underdevelopment. *Polit. Soc.* 4, 267, 1974; What does Chile mean: an analysis of events in the health sector before, during and after Allende's administration. *Milbank mem. Fund. q. bull.* 52, 93, 1974.

In the same vein, but more specifically related to medical pluralism, we find Kleinman talking of an integrated approach to field study of different medical systems in which the "ring of cultural, ecological, epidemiological, social, economic and political considerations surrounding medical systems can be studied together as critical determinants of medical care" (Kleinman A. Toward a comparative study of medical systems. *Sci. Med. Man* 1, 55, 1973). Janzen discusses the need to understand changes in health care struc-

- tures in terms of political process and power and the many ways in which different types of healing systems are legitimized (Janzen J. M. The comparative study of medical systems as changing social systems. *Soc. Sci. Med.* **12**, 121, 1978). Elling, in tune with Navarro, emphasizes that "medical systems change primarily as a result of, or in conjunction with broad change in national and international political economic orders" (Elling R. H. Medical systems as changing social systems. *Soc. Sci. Med.* **12**, 107, 1978). Of course, the numerous material available from China almost uniformly touch on the importance of such inter-relationships [see 6].
9. For a discussion of regional and local health care systems see: Dunn F. L. Traditional Asian medicine and cosmopolitan medicine as adaptive systems. In *Asian Medical Systems* (Edited by Leslie C.), pp. 133-158. Univ. Calif. Press, Berkeley, 1976.
  10. See [8].
  11. The situation is similar to, but possibly not as stringent as, that of Indonesia as described by Jaspan: "No attempt is made to recruit the assistance of traditional doctors. On the contrary, modern medicine treats its traditional counterpart with contemptuous repudiation, and would undoubtedly resist any attempt at the professionalization of traditional doctors within the framework of the state or any other modern medical system. This attitude is, however, asymmetrical, for the folk doctors are willing to share their knowledge with modern doctors and to be trained in some aspects of modern medicine." Jaspan M. A. The social organization of indigenous and modern medical practices in southwest Sumatra. In *Asian Medical Systems* (Edited by Leslie C.), p. 240. Univ. Calif. Press, Berkeley, 1976.
  12. Dunn F. L. Medical care in the Chinese community in Peninsular Malaysia. In *Medicine in Chinese Cultures: Comparative Studies on Health Care in Chinese and Other Societies* (Edited by Kleinman A. et al.). DHEW Publ. No. (NIH) 75-683, J. E. Fogarty Int'l Center, NIH, US Pub. Health Service, Washington D.C., 1975.
  13. Chen P. C. Y. Traditional and Modern Medicine in Malaysia. *Comp. Med. East West*. In press.
  14. Dunn F. L. Traditional beliefs and practices affecting medical care in Malaysian Chinese Communities. *Med. J. Malaysia* **29**, 7, 1974.
  15. Meade M. On Chinese medicine in Malaysia. Manuscript for the Institute for Medical Research, Kuala Lumpur (no date).
  16. Colley F. C. Traditional Indian medicine in Malaysia. *J. Malaysian Br. R. Asiat. Soc.* **51**, 77, 1978.
  17. Press I. Urban folk medicine: a functional overview. *Am. Anthropol.* **80**, 71, 1978.
  18. Malaysian Society of Health. *Berita* **1**, 4, 1978.
  19. See [13].
  20. Chen P. C. Y. Medical systems in Malaysia: cultural bases and differential use. *Soc. Sci. Med.* **9**, 171, 1975.
  21. Heggenhougen H. K. Traditional Malay Medicine Association. *Med. Anthropol. Newsl.* **9**, 8, 1978.
  22. See [2].
  23. Janzen J. M. The comparative study of medical systems as changing social systems. *Soc. Sci. Med.* **12**, 121, 1978.
  24. For an explanation of the "wayang kulit" and "main putri", and "berjin" and "berhantu" possession trances, related to traditional Malay healing, see e.g.:  
Chen P. C. Y. Main puteri, an indigenous Kelantan form of psychotherapy. *Int. J. soc. Psychiat.* In press.  
Mohd Taib Osman. The bomoh and the practice of Malay medicine. *S.E. Asian Rev.* **1**, 16, 1976.
  25. Heggenhougen H. K. and Navaratnam V. Initial documentation of traditional Malay treatment of drug addicts in Malaysia. Siri Monograf, Universiti Sains Malaysia, Penang, in press.
  26. Heggenhougen H. K. and Navaratnam V. Traditional therapies in drug dependence management. Excerpts used for Herbal therapy in the war on drug addiction. *UNESCO Courier* July, 38, 1979.
  27. Mohd Taib Osman. The bomoh and the practice of Malay medicine. *S.E. Asian Rev.* **1**, 23, 1976.
  28. Mohd Taib Osman. Patterns of supernatural premises underlying the institution of the bomoh in Malay culture. *Bijdr. Taat-Land-en Volkek.* **128**, 219, 1972.
  29. Heggenhougen H. K. The utilization of traditional medicine, a Malaysian example. *Soc. Sci. Med.* **14B**, 39, 1980.
  30. Kinzie J. D., Teoh J. T. and Tan E. S. Community psychiatry in Malaysia. *Am. J. Psychiat.* **131**, 573, 1974.
  31. Jelliffe D. B. and Jelliffe E. F. The cultural cul-de-sac of Western medicine (towards a curvilinear compromise?). *Trans. R. Soc. trop. Med. Hyg.* **71**, 331, 1977.
  32. Morinis E. A. Two pathways in understanding disease: traditional and scientific. *WHO Chron.* **32**, 57, 1978.
  33. Colson A. C. The differential use of medical resources in developing countries. *J. Hlth soc. Behav.* **12**, 226, 1971.
  34. See [29].
  35. See [13].
  36. Jaspan M. A. The social organization of indigenous and modern medical practices in southwestern Sumatra. In *Asian Medical Systems* (Edited by Leslie C.), pp. 227-242. Univ. Calif. Press, Berkeley, 1976.
  37. See [1].
  38. See [33].
  39. See [1].
  40. Reading A. Illness and disease. *Med. Clins N. Am.* **61**, 703, 1977.
  41. Mahler H. The health of the family. Keynote address delivered at the *International Health Conference of the National Council for International Health*, Washington D.C., 16 Oct. 1974.
  42. Kleinman A. M., Eisenberg L. and Good B. Culture, illness and care—clinical lessons from anthropologic and cross-cultural research. *Ann. intern. Med.* **88**, 251, 1978.
  43. Engel G. L. The need for a new medical model: a challenge for biomedicine. *Science N.Y.* **196**, 129, 1977.
  44. This belief in the supremacy of "science", however, may have as much of a placebo effect as the belief in a bomoh or in the power of his helping spirits. Riley has stated that, "Placebos depend upon a patient's (and perhaps a physician's) belief that the therapy is likely to work; consequently, placebos are inherently culture-dependent. To the extent that belief in science is shared, science itself has a placebo effect. Religious rituals have similar placebo effects. . . . One can expect that just as for the believer in science, medical care which appears to be scientific would provide a superior placebo; for the believer in religion, or the possessor of whatever other cultural system of meaning and values, medicine which appears to partake of these other symbols would provide a superior placebo" (Riley J. N. Western medicine's attempt to become more scientific: examples from the United States and Thailand. *Soc. Sci. Med.* **11**, 549, 1977).
  45. Wildavsky A. Doing better and feeling worse: the political pathology of healing policy. *Daedalus, Boston* **106**, 105, 1977.
  46. Fernandez J. Persuasions and performances: of the beast in everybody . . . and the metaphors of Everyman. *Daedalus, Boston* **101**, 39, 1971.
  47. Kleinman A. M. Medicine's symbolic reality. *Inquiry* **16**, 206, 1973.
  48. Moerman D. E. Anthropology of symbolic healing. *Curr. Anthropol.* **20**, 59, 1979.
  49. Frank J. Mind-body relationships in illness and healing. *J. int. Acad. prev. Med.* **2**, 46, 1975.



50. See [48].
51. Pelletier K. R. *Mind as Healer, Mind as Slayer—A Holistic Approach to Preventing Stress Disorders*. Delacorte Press, New York, 1977.
52. Meites J. The 1977 Nobel Prize in physiology or medicine. *Science*, N.Y. **198**, 594, 1977.
53. See [48].
54. Doyal L. and Pennell I. 'Pox Britanica', Health, medicine and underdevelopment. *Race & Class* **18**, 155, 1976.
55. Heggenhougen H. K. Why does traditional medicine persist? *Bull. Publ. Hlth Soc. Malaysia* **13**, 60, 1979.
56. Rappaport H. The tenacity of folk psychotherapy: a functional interpretation. *Soc. Psychiat.* **12**, 127, 1977.
57. Jones W. T. World views and Asian medical systems: some suggestions for further study. In *Asian Medical Systems* (Edited by Leslie C.), pp. 383-404. Univ. Calif. Press, Berkeley, 1976.
58. Torrey E. F. *The Mind Game: Witchdoctors and Psychiatrists*. Bantam Books, New York, 1973.
59. See [26].
60. See [23].
61. Bulger R. J. (Ed.) *Hippocrates Revisited—A Search for Meaning*. Medcom Press, New York, 1973.
62. Ackerknecht E. H. *Rudolf Virchow: Doctor, Statesman, Anthropologist*. University of Wisconsin Press, Wisconsin, 1953.
63. There seem to be a growing number of these physicians and increasing attention paid to them. The Director-General of WHO has stated that "If ever there was a case for participatory democracy it is health. We must get away from the sort of service arrangements that suit the professionals more than the consumers, and make it instead, if you will, a buyer's rather than a seller's market. Health services must be ruthlessly restructured in a manner that they consistently aim at increasing human well being. The physician must cease to be an isolated dispenser of more or less effective medicines and become a socially dedicated member of health team with responsibilities for promoting everybody's health" (Mahler H. Health of the family. Key-note address delivered at the *International Health Conference of the US National Council for International Health*, Washington D.C. Oct. 1974).
- The student representative of the 1978 graduating class of the University of California (San Francisco) School of Medicine claimed that he highly valued "the technological, logical and tough minded training... acquired in medical school" but he felt that "Medicine needs the female principles, the yin side of life, just as it needs the male principles, the yang side of life. The public is asking for compassion, nurturance, and sensitivity as well as competence, intelligence, and dedication from their physicians. Too much of anything, no matter how intrinsically good it may seem, is damaging" (May S. On my medical education: seeking a balance in medicine. *Med. Self Care* **5**, 37, 1978).
- From the highlands of Guatemala, Dr Behrhorst exemplifies a consistent challenge: "How many great names in medicine, present and past, can look, or have looked, out the window from the throne of their medical or surgical empires in a dignified school of medicine, onto the poverty and slums just across the street, and are completely oblivious to it all 'out there'? Open heart surgery is medicine (they say)—treating tuberculosis by a fight against poverty and malnutrition and inequitable land tenure and social injustice is not (again they say). I say bull..." (Behrhorst C. Alternatives in offering of community health services, some notes. Behrhorst Clinic Chimaltenango, Guatemala, mimeo, n.d.).
64. Singer P. (Ed.) *Traditional Healing: New Science or New Colonialism*. Conch Mag. Ltd., New York, 1977.
65. See [12].
66. Wolff R. J. Modern medicine and traditional culture: confrontation on the Malay Peninsula. *Human Org.* **24**, 339, 1965.
67. See [64].
68. Bachtiar H. W. The religion of Java: a commentary. In *Madjallah Ilmu-Ilmu Sastra Indonesia* (Edited by Koentjaraningrat), pp. 95 and 97. 1973.
69. Declaration of Alma Ata. *Contact* **47**, Oct., 1978.
70. See [15].
71. See [41].
72. New P. K. M. Traditional and modern health care: an appraisal of complementarity. *Int. Soc. Sci. J.* **29**, 485, 1977.
73. Taylor C. E. et al. Asian medical systems, a symposium on the role of comparative sociology in improving health care. *Soc. Sci. Med.* **7**, 307, 1973.
74. Adumwagun Z. A. The relevance of Yoruba medicine men in public health practice in Nigeria. *Publ. Hlth Rep.* **84**, 1085, 1969.

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## THE ORGANIZATION AND PRACTICE OF EAST ASIAN MEDICINE IN JAPAN: CONTINUITY AND CHANGE

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**Abstract**—Traditional East Asian Medicine is undergoing a popular revival in modern Japan and is analysed in this paper in order to demonstrate its structure and organization in historical times and continuities, discontinuities and revivalism of aspects of traditional theory and practice in contemporary times. The reasons for a popular revival and the process of re-legitimation are then discussed. Both historically and in contemporary times, the training and social organization within which traditional Japanese practitioners work encourages reductionism, factionalism, competition and innovation. A variety of theoretical models and medical practice is applied within this system, so that despite a shared classical heritage, it is in reality pluralistic.

The popular revival is being reinforced by the mass media, changes in legal sanctions and government-sponsored research. But official responses tend to encourage the promotion of control of traditional medicine by applying the standards of science to it and by incorporating it into the organization devised for the practice of cosmopolitan medicine. It is demonstrated that institutional legitimation can lead to the sacrifice of those special features of traditional medicine, including pluralism, which are deemed most valuable by patients.

It has been reported in the *Asahi Shinbun* (the newspaper with the largest daily circulation in Japan) that 1976 was the year of *kanpō gannen* ("the first year of the reign of East Asian medicine") [1]. The article appeared in reference to the passage of a new law in which more than 100 traditional herbal prescriptions had been added to the list of medicines available under the national health insurance system. The law is one of several official responses to the marked revival of interest in traditional medicine of all kinds in modern Japan. This revival is described in popular language as the *kanpō boomu* (boom in East Asian medicine). Given the remarkable changes that Japan has undergone since the Second World War, changes associated largely with a rapid expansion of science and technology, a resurgence of traditional medicine seems surprising. At first glance the Japanese appear to have coped with and benefited from the process of development: in a recent national survey, 90% of the population described themselves as middle class and the literacy rate is estimated at 98%. Life expectancy for men is 72.3 years and for women 77.6 years—making Japan one of the leading four countries in the world [2]. These figures appear particularly dramatic when it is recalled that until the end of World War II, life expectancy for both sexes was below 50 years of age.

The present paper has the following objectives: first, to describe briefly the structure and organization of the traditional medical system. Secondly, I will discuss through an examination of continuities, discontinuities and revivalism aspects of traditional theory and practice how the contemporary East Asian medical system meshes with some current Japanese ideas about the nature and meaning of illness and hence confirms a prevailing ontological order. Finally, an attempt will be made to demonstrate how and why

the traditional medical system is being re-legitimated at the present time.

### STRUCTURE AND ORGANIZATION OF THE EAST ASIAN MEDICAL SYSTEM IN JAPAN

Both historically and in contemporary times social organization in Japan is characterized as giving primacy to vertical bonds rather than horizontal ties. Within any group, personal ties and loyalty between subordinates and superiors, whether it be within the family, between teacher and pupil or employer and employee is stressed. Moreover loyalty implies, as Bellah puts it [3] "not mere passive devotion but active service and performance". He develops this point by stating that "work itself is not a value, but rather work as an expression of selfless devotion to the collective goal is valued". Thus one works for one's group in order that it will be successful and hence prestige is attained on a collective basis. In such a system, opportunity for an innovative and achievement-oriented individual to outshine a superior or even to be offered a partnership in business, for example, is virtually impossible. The result is that fission of groups is frequent, and the formation of factions in which a potentially dynamic leader breaks off from the parent group with a cluster of followers is considered normal. This process is seen most clearly in Japanese politics and business but extends into every sphere of life, including the medical world, both historically and in contemporary times.

Just prior to and throughout the Edo period (1600–1867) three major centres of scholarship emerged in Japan: the Emperor and his retinue provided one focus in Kyoto and the Shogun residing in Edo (now Tokyo) stimulated the emergence of a second intellectual center. The third area was the iso-

lated island of Deshima off the coast of Kyushu where contacts were made with a handful of European scholars, including doctors, who were allowed to reside there throughout the two and a half centuries during which Japan was essentially closed to the outside world. Three major medical factions emerged as a consequence of this political situation. The *gosei* faction was established in Kyoto under the leadership, originally, of Dosan Manase (late 16th century). In Edo, more than 100 years later and in parallel to a new movement in Confucianism, a reform school of medicine, the *koho* faction [4] was founded. Finally, a third school emerged, that of *rangaku*, the Dutch school, composed largely of doctors from the *koho* faction who had contact with Dutch scholars on the isolated island of Deshima and who were influenced by certain aspects of European medicine [5]. Literacy rates were high and medical texts were readily available at these major centers of learning. Both the *gosei* and *koho* factions were legitimated as corporate groups, to use Janzen's terminology [6], in that they maintained a coherent body of beliefs within the group, possessed autonomy and supervised training and licensing of their members and were supported by the dominant political authority in their region. The Dutch school underwent changes throughout this period which would have eventually lead towards the foundation of a corporate group, but it was ultimately absorbed during the Meiji Restoration of 1868 by the newly nationally supported European-style system.

The practice of medicine was not limited to these major factions, however: during the Edo period each feudal domain retained considerable independence, including autonomy in the sphere of education. Schools were established in each fief, some of which specialized in medicine [7]. There were, in addition, numerous unlicensed practitioners working independently and using a variety of combinations of traditional East Asian medicine with folk medicine [8].

The picture is compounded further because with the development of urban life and the rise of the merchant class the formation of guilds was established, some of which became official licensing bodies for certain techniques formerly thought of as primarily medical. One such guild furnished training for blind students in massage (*amma*) techniques and massage became associated from this time on with both relaxation and health maintenance [9]. In the mid-seventeenth century a school was established to educate and license the blind to do acupuncture using a highly pragmatic form of training. One consequence of those developments was that the prestige accorded to the practice of acupuncture and massage fell because the social status of blind people was generally low.

Theoretically a knowledge of all the therapeutic techniques of East Asian medicine is expected when practicing traditional medicine (dietary therapy, herbalism, acupuncture, moxibustion [10] and massage). However, there is a long precedent for the use of a reduced form of medical practice in Japan. Firstly, the majority of practitioners who were not associated with the major factions did not have ready access to medical texts or to medical supplies. Secondly, at least until the Meiji Restoration, many practitioners travelled around the countryside and from town to town in order to administer treatment. This type of exist-

ence naturally enhanced a reductionistic approach towards medical practice. The introduction of blind practitioners into the medical arena led to further fragmentation in theory and practice so that by the eighteenth century therapeutic specialists became the norm. The art of mixing and prescribing medicine was the most prestigious type of therapeutic activity, in part because obtaining the raw materials (most of which had to be imported) was expensive and in part because one needed to be literate and have access to medical texts to master the complex prescription procedure. Specializing in acupuncture or massage, whether one was blind or not, was generally associated with less prestige. Despite differences in status these various schools and guilds survived until the Meiji Restoration as officially sanctioned corporate groups. The relationship between the groups was, however, hierarchical and asymmetrical [11] with most power amassed in the hands of the leading factions based in Edo and Kyoto.

Confucian principles of loyalty and obedience were taught explicitly in every type of training situation and strict secrecy among pupils regarding the techniques of the school was required [12]. Competition between schools and factions was apparently rife and it has been suggested that the relatively rapid acceptance of some Western medical techniques and the production of many books at this time are results of the competitive atmosphere (Yoshida: personal communication). Upon graduation from school, students were usually apprenticed to practicing doctors. In this situation, despite the theoretically holistic approach of East Asian medicine, further specialization and hence a trend towards reductionism was frequently the case. Doctor's families survived competition by being innovative, and therapeutic specialization was the locus of their claim to having superior skills and knowledge. Family pharmacopoea with special formulae came to be treasured secret documents. Other medical families specialized in the manipulation of acupuncture needles in certain ways, or in the preparation, for example, of moxa for cauterization in a unique fashion [13].

The existence of factions and competition between practitioners of East Asian medicine was therefore usual and was enhanced by vertical alliances in which hard work and innovation was promoted for the sake of one's immediate group. The medicine available historically in urban areas of Japan was pluralistic in that patients had access to many types of folk medicine as well as to licensed practitioners of East Asian medicine. Even within the East Asian medical system itself, pluralism was prevalent in that there were many licensing authorities, a variety of theoretical beliefs some of which incorporated aspects of European medicine, others of which made use of folk medical theory. There was also a specialist approach to therapeutic techniques and, because of status differences and competition, lack of co-operation and communication between specialists.

With the Meiji Restoration, strong centralization of government, the official adoption of the European medical system, and the establishment of a national medical licensing system, major reorganization took place within the Japanese medical world. The prestigious *kanpō* [14] doctors (specialists in herbal medi-

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cine as opposed to acupuncture practitioners) suffered most, since they were potentially the greatest threat to the new system. It became required for would-be *kanpō* practitioners to become licensed MD's first, before they could practice traditional medicine and hence their status as a corporate group was abolished. Acupuncture and masseurs fared considerably better in that they retained independent autonomous licensing systems, their own educational facilities and a professional organization, albeit weakened through factionalism. Their identity as corporate groups survived but the medical system remained hierarchical and asymmetrical and the status and power of acupuncturists and masseurs was restricted; no formal connections were established with the major universities, and licensed practitioners, as opposed to MD's, were denied the right to prescribe drugs.

#### CONTINUITY IN CONTEMPORARY EAST ASIAN MEDICINE

The dominant medical system in modern Japan is, of course, cosmopolitan medicine [15]. The majority of Japanese families have a family doctor who operates a private clinic in the neighbourhood [16]. Cosmopolitan medicine is covered by a national health insurance system or by a company insurance system. In addition there are in each neighbourhood numerous clinics which offer predominantly East Asian medicine. These clinics are owned and operated by licensed practitioners who have been trained in the equivalent of a 3-year junior college. The practitioners in these neighbourhood clinics usually specialize in acupuncture, moxibustion, massage or traditional bone setting or, less frequently, in combinations of these therapeutic techniques. In the larger urban areas patients will also have access to traditional herbal pharmacists and to one or more *kanpō* practitioners (in Kyoto, for example, there is a total of eight *kanpō* doctors, all of whom are MD's). Furthermore, many types of folk and popular [17] medicine are flourishing in contemporary Japan. Apart from cosmopolitan medicine the other types of health care must all be paid for privately, although the cost is usually based on a sliding scale and ranges between \$1.00 and \$15.00 per visit [18].

A variety of medical systems is therefore available to urban Japanese and, in modern Japan as in historical times, within the East Asian system itself pluralism exists and continues to be based on the distinctions noted above.

A cursory examination of traditional medical clinics in contemporary Japan leaves one with an impression of a great variety in beliefs and practice—the product largely of continued competition and factionalism (to be discussed shortly). Closer inspection reveals a core of shared beliefs in certain fundamental areas, the heritage of the interaction of East Asian medicine with Japanese culture for more than a thousand years. The present discussion of continuity in beliefs will be limited to three points: attitudes towards actual theory, the concept of holism, and the demonstration of empathy.

All the practitioners who were interviewed confine themselves strictly to the use of traditional thera-

peutic techniques. No synthetic drugs are used even in the *kanpō* clinics [19]. The practitioners believe that all types of traditional therapy produce changes at the microscopic level which aid in the healing process; they are also equally convinced that, with reasonable application of caution, the techniques do not cause harmful side-effects. They, therefore, feel very positive about using the system and believe it to be superior to cosmopolitan medicine in this respect. While certain prescriptions have been removed from the pharmacopoeia, attitudes towards therapy and therapeutic techniques remain largely unchanged since classical times. The most fundamental point in classical texts is still highly emphasized: that therapy should be as mild as possible and act as a type of catalyst in order to enhance the body's inherent powers of healing.

Continuity in traditional medical practice is also evident in relation to the concept of holism. This concept has two meanings to a traditional East Asian doctor: that of considering all the parts of the body to be inter-connected and mutually affecting each other, and secondly, of viewing the human body as being in constant interaction with, and affected by, the environment, both social and physical. Practitioners who were interviewed, without exception, all believe that they are using therapy which will do more than remove the principal complaints of the patient, and will have some effect on the entire body. This is true even where the practitioner provides exactly the same kind of treatment to all his patients. Some practitioners consider that they induce a series of electrochemical energy changes involving the nervous system. Others believe that they are dealing with *ki* and the traditional meridian system [20], but both explanations incorporate the idea that the treatment is effective in the first sense described above and that in this sense it has advantages over cosmopolitan medicine.

Contemporary traditional practitioners, like the majority of their patients, accept biomedical explanation for disease causation, but they believe that only rarely is the biomedical explanation a sufficient cause. Particularly in instances of chronic disease combinations of environmental, social and psychological explanations are also invoked as necessary factors which leave the body vulnerable. A holistic, ecological approach is acknowledged but although these explanations are elicited and discussed during treatment sessions, they are virtually never dealt with directly by the practitioner. The focal point of the healing process is not thought of as the interaction between doctor and patient but rather as the sick person at the center of an involved family. The therapist's role is to provide physical therapy, but it is the task of the patient and particularly his or her family and, where appropriate, employer, to deal with social and psychological issues [21]. However, the practitioner by discussing various possible causes during diagnosis allows for exculpation [22], not only through biophysical notions, but also through concepts of stress, overwork and so on, which is usually in close accord with patient beliefs. Doctor and patient agree that the locus of responsibility for health and healing lies largely with the family and not the practitioner. This allows a patient to place trust in a therapist without incurring an obligation caused by excessive depen-



dency which would be impossible to repay according to Japanese values [23, 24].

The last example of points of continuity with the classical tradition concerns a dominant value in Japanese culture which is not limited to medical practice—that of empathy (*omoiyari*). Lebra states that she is “tempted to call Japanese culture an ‘*omoiyari* culture’” [25]. Sensitivity to the feelings of others, an ability to understand another’s pain or pleasure is valued highly. The therapists display the ability to be gentle in their touch and able to listen to patient’s troubles to a remarkable degree. The majority of treatment sessions last between 30 min and 1 hr. The patient does not expect the therapist to alter the inevitable stresses of living, but he or she does expect that their sentiments will be shared and sympathized with and traditional practitioners, unlike Japanese cosmopolitan doctors who are hampered by the structure of the socialized medical system, work within a framework in which there is time allowed in order to demonstrate empathy. The very nature of the diagnostic and therapeutic techniques employed encourage prolonged close physical contact with patients in a relaxed atmosphere. A large portion of the body is gently palpated and massaged during both diagnosis and treatment whatever the speciality of the clinic and discussion of the patient’s life-style and problems is encouraged either by the practitioner himself or by other patients present at the time. Many cosmopolitan doctors also believe in the importance of empathy but the majority work under enormous time pressure and less than 5 min with a patient is the usual practice [26, 27].

The fact that contemporary practitioners of East Asian medicine share a long historical tradition, retain certain fundamental beliefs in common derived originally from the same texts and all state that they practice *toyoigaku* (Asian medicine) indicates that they are part of one medical system. But there are also many discontinuities in the belief system and in actual medical practice some of which are shared by the majority of practitioners, others of which are limited to certain of them. Furthermore, there has been innovation, adaptation and revivalism over the years which has led to a highly diversified and pluralistic system.

#### PLURALISM AND PROFESSIONALISM IN CONTEMPORARY EAST ASIAN MEDICINE

Discontinuities in the traditional belief system are most apparent in labelling and explanatory theories for disease causation. It is claimed by all practitioners that patients do not understand traditional explanatory concepts and only feel confident with practitioners who use scientific terminology. The traditional concepts such as yin and yang, the five phase theory and *ki* [28] are not used with patients at all. In fact, in most acupuncture, moxibustion and massage clinics the practitioners themselves have rejected traditional explanatory theories and believe that eventually the entire traditional theoretical system will be explained using scientifically based concepts. The *kanpō* doctors, some highly educated herbal pharmacists and other practitioners who are MD’s are interesting exceptions to this trend. While they use cosmopolitan medical

language with their patients, their professional, esoteric language includes an active use of traditional concepts as well as scientific concepts. The use of traditional concepts are essential in diagnostic decision-making and selection of therapy and provide the basis for intellectual debate and discussion [29]. This practice is quite deliberately fostered because it is categorically believed that much of traditional medical theory cannot be reduced to scientific explanations, that it is a different but empirically sound paradigm which is, of course, subject to modification and improvement. Scientific analysis of theory and therapeutic techniques is acceptable but cannot furnish an exhaustive explanation.

A second area in which discontinuities are most apparent and in which practice is extremely varied is that of diagnosis. In the traditional system diagnosis is made on the basis of a lengthy interaction between doctor and patient involving both verbal and non-verbal exchange. The standard techniques of diagnosis rely heavily on the doctor’s use of his basic senses—those of touch, hearing and vision and, to a lesser extent, that of smell. A co-operative patient is one who has paid attention to the effects of the environment upon his or her health and can sense these effects as mild somatic changes which can be described verbally. This information is welcomed by the doctor and incorporated into the diagnostic decision-making. Diagnosis is therefore made on the basis largely of qualitative and subjective data obtained by a contribution from both doctor and patient.

Of the 12 clinics analysed, four rely primarily on traditional diagnostic techniques, in two clinics where MD’s are present cosmopolitan and traditional techniques are combined, in two other clinics patients arrive with a cosmopolitan diagnosis printed on their referral forms, in one other, chiropractic diagnostic techniques are used and in the three remaining clinics (including that of an M.D.) no diagnosis is made at all. This variety of approaches to diagnosis is largely explained by the patient population which appears in each of these respective clinics—a topic which will be discussed shortly.

Innovation and revivalism in the traditional medical system is also dependent to some extent on the patient population but it is in addition influenced by the concept of professionalism which will be considered next.

The question of professionalization in contemporary East Asian medicine is extremely complex. As MD’s the *kanpō* doctors are subject to the same training privileges and restrictions as are all licensed doctors in Japan but, of their own choice, they do not belong to the Japanese Medical Association nor do they usually subscribe to ordinary medical journals or attend conferences on aspects of cosmopolitan medicine. *Kanpō* doctors have their own association, conferences and journals which are well-established and highly organized. However, there are still two quite distinct factions within the *kanpō* world, based on the original *gosei* faction of Kyoto and the *koho* faction in Tokyo. Practitioners readily state which faction they belong to, although they are in constant communication through journals and conferences. Nevertheless, there are some distinct differences in the belief system and practice of these two factions. The Kyoto

group is more conservative, uses a simplified version of the traditional yin/yang and five phase theories [30], traditional dietary theories and practices acupuncture, moxibustion and herbal medicine. The Tokyo group uses only a modified yin/yang theory and herbal medicine. They do not use acupuncture or moxibustion, and incorporate more of cosmopolitan medicine into their practice.

Acupuncturists and masseurs each have a national organization and a licensing body, journals and conferences, and there is considerable standardization of what is taught in school, but factionalism is sufficiently rife that small, regional organizations are given priority over the national ones. Among *shiatsu* [31] practitioners, for example, there is said to be over 250 factions today. All students of traditional medicine study modern anatomy and physiology in their 3-year junior college training program but the way in which traditional theory and techniques are taught vary considerably from a conscious effort to demonstrate that traditional medicine can be made scientific to an attempt to adhere to the classics as fully as possible.

Factionalism is largely based upon geographical location and upon which school one attends but the organization of the educational system itself enhances further divisions among students. Almost all graduates who go into traditional medical practice, continue to enter, upon graduation, a period of apprenticeship under an experienced practitioner. It is here that virtually all of a student's clinical experience is obtained. MD's who enter an apprenticeship in *kanpō* have, of course, already undergone clinical training in medical school but in a *kanpō* clinic they must be retrained rather drastically. Leslie has made a distinction between technical and tacit knowledge [32]; that which is standardized, explicated in textbooks and subject to abstraction, as opposed to that which is not readily codifiable and which must be learnt by imitating the example of a master. The initial training of East Asian practitioners is, of course, largely technical today, but during the clinical apprenticeship the assimilation of tacit knowledge comes to the fore and referral to textbooks is almost non-existent. This is particularly true in the teaching of diagnostic methods and the therapeutic techniques of acupuncture, moxibustion and massage. In the application of herbal therapy today, use is largely made of technical knowledge which is learnt from standardized books although the principles are different from those of pharmacology, and, since traditional diagnosis depends upon tacit knowledge, the selection of the appropriate herbs is highly complex [33]. The clinical training of *kanpō* doctors, therefore, retains a larger proportion of technical to tacit knowledge than does the training of apprentices in other types of East Asian clinics, but, nevertheless, even in the *kanpō* clinics training in tacit knowledge is highly valued, considered much more difficult to master, and an intense life-long bonding is established between teacher and student. At the other end of the spectrum, some students who are sons of moxibustion practitioners, for example, will attend college to obtain their license and then, upon graduation, return to their father's house and learn one or two simple traditional techniques. These students often forget any technical

knowledge they have been examined upon and practice a very limited type of traditional medicine in which they make no diagnosis but simply try to induce symptom relief.

The senior practitioner in all East Asian clinics, in the role of a teacher, is explicitly aware that he is teaching not only medical knowledge, usually both technical and tacit, but also a moral and ethical code which stresses above all loyalty to one's professional group. This loyalty is expressed most frequently towards one's teacher and the faction which the teacher represents.

It is characteristic in almost any type of learning situation in Japan that rather precise goals and methods for achieving these goals are laid out carefully in advance. As novices, people are required to learn without questioning authority and to thoroughly internalize, usually through repetitious action, a given body of knowledge or activities. Once graduation, licensing, or initiation is achieved and mastery is acknowledged, then individual initiative, responsibility and creativity in application of the knowledge is expected. The philosophy of Zen Buddhism is greatly influential in this attitude towards training and was particularly so during the Edo period. Its most obvious mode of application in modern Japan is in the traditional arts and theatre, the martial arts and so on, but it is also evident in skilled labour, catering, advertising, and marketing of goods in general. After a rigorous, conservative period of training, people who enter into entrepreneurial, competitive situations often believe that by being innovative as well as efficient, they can provide the best kind of service and attract customers.

The student of traditional medicine therefore undergoes two periods of formal training. During the second period, if the student is apprenticed into a very traditional clinic with emphasis on qualitative techniques, much of what he or she may learn can be rather opposed to the highly quantitative and scientific approach provided in many of the junior colleges. The second clinical period may last for 10 or more years and is usually terminated when the apprentice can become financially independent. From this time on, the practitioner becomes a self-employed business man, often in direct competition with his former teacher and peers. Individual innovation is often necessary in order for the practitioner to establish himself and survive. Usually feelings of loyalty and respect are retained for one's teacher despite the final achievement of independence, but frequently the competition leads to factionalism and fragmentation, something which Unschuld characterizes as the "continuous competition of various groups for medical resources" [34]. The overall effect of this system is to act in opposition to establishing contemporary East Asian medicine as a profession with extensive political influence.

#### THE PATIENT POPULATION

Patients of every income group and educational level make use of traditional medicine. The majority of patients select a neighbourhood clinic where they will already be acquainted with the practitioner and where they will meet other members of their com-

munity (90% of the 50 families sampled in this study had visited their local acupuncture, moxibustion or massage clinic for more than one trial visit). A few clinics act as the focal point for relatively wealthy patients drawn from a larger geographical area. Other clinics are well known for the application of special techniques or for dealing with certain medical problems and in this case all types of patients will come for treatment, often travelling for up to half a day to the clinic [35].

The medical problems brought to licensed practitioners are predominantly chronic problems involving the muscular and/or the skeletal system and also mild non-specific, but chronic problems. Approximately one third of the patients in neighbourhood clinics go directly for traditional treatment without visiting their family cosmopolitan-style doctor first of all. Of the remaining patients 33% are referred by their family doctor and the remaining group are self-referred as the result of dissatisfaction with cosmopolitan medicine. In clinics run by MD's, and particularly in the *kanpō* clinics, the patients will bring a complete range of medical problems with the exception only of acute infections and traumatic injuries. In these clinics 95% of the patients have been to their family doctor first of all and turn to traditional medicine only when they fail to obtain relief with cosmopolitan medicine. The reason few people go directly to a *kanpō* clinic is because these clinics are not a familiar sight in every neighbourhood and therefore less well known and are only searched out under the pressure of chronic illness.

Competition between neighbourhood clinics has encouraged adaptation and innovation in medical practice. Some practitioners have selected to stress that traditional medicine can be approached in a scientific fashion. Their clinics are filled with machines to aid in finding acupuncture pressure points, or with others which apply moxa or massage mechanically, for example. Other practitioners have decided to limit themselves solely to the application of one therapeutic technique. Their practice is extremely reduced, no diagnosis is performed and little advice offered but instead they rely upon a steady flow of clientele who simply wish for symptom relief. Others choose to appeal to patients from a large geographical area by offering a unique treatment for a particular problem such as convulsions or tobacco addiction. Still other practitioners promote a more classical, holistic approach to medical practice and stress dietary therapy, mild, long-term treatment and an inquiry by the patient into social and psychological issues which might have a bearing on the medical problem.

Revivalism of traditional theory is most apparent in *kanpō* clinics and among acupuncturists who are MD's. Their incentive to re-examine the classics and particularly preventive medicine is encouraged by their patients who are usually well-educated, often reflective people. Patients have read about and are concerned with the universal problems related to industrialization and the use of technology and are interested in trying to benefit from the vast body of empirical knowledge collected in historical times.

Despite some shared beliefs, therefore, traditional medical practitioners approach their medical practice

in a variety of ways. This is partly due to the nature of their basic training, partly due to their clinical training and also due ultimately to the location of their own clinic, to the clientele who come there and to the personality and interests of the actual practitioner.

#### MODERN REVIVAL OF EAST ASIAN MEDICINE

In the past 15 years in Japan there has been a revival of interest in traditional medicine which is leading gradually to a process of re-legitimation of the system and to its emergence once again as a distinct social force. Several factors must be considered in order to account for this process.

Current trends in Japanese society encourage the use of the traditional medical system: firstly, Japan is at present undergoing the process which is self-consciously termed *Nihonka* (Japanization). As after other periods of drastic social change and innovation, a time of re-evaluation is occurring in which traditional aspects of Japanese culture are being actively fostered, including forms of art and physical activity which share a philosophy closely linked to that of traditional medicine. Secondly, much scientific research in Japan today, as in the West, stresses the use of ecological and cybernetic models. The model of traditional medicine is, in theory, holistic and there is, therefore, an opportunity for traditional medicine to be promoted in terms of a fruitful union of the ancient with the very modern. This tendency has been enhanced by the recent positive attitude in China towards traditional medicine—something which was watched very carefully in Japan—and by the active interest of visiting foreigners, including MD's, in Japanese traditional medicine.

The rapid post World War II changes in the epidemiology of disease with a rise in the incidence of chronic disease and in life expectancy are further particularly significant factors. Analysis of 200 patient interviews demonstrates that while some patients have consistently made use of traditional medicine for certain complaints, the majority of the patients turn to traditional medicine only when they find no relief in the cosmopolitan medical system. Personal experience with chronic illness is the deciding factor but interest in traditional clinics is reinforced by the mass media which is currently devoting considerable time and space to traditional medicine of all kinds and is also avidly reporting malpractice and failures in the cosmopolitan medical system.

One topic stressed above all others is the toxicity of many synthetic drugs. The Japanese public is extremely sensitive to possible side-effects from medication not only because of dramatic and publicized evidence of it, but also because of the occurrence of pollution-caused diseases. Medicine was traditionally regarded as part of a spectrum of naturally occurring related substances ranging from food—medicine—poison. While herbal medicine is categorized at the food end of this continuum, synthetic medicine has been placed closer to poison, and thus, is readily assigned similar qualities as chemical pollutants in the environment. Furthermore, traditional Shintō-derived religious beliefs reinforce a fear of contamination by substances and objects defined as polluting and there is evidence

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that this belief system is still functional today [36]. The majority of patients in a traditional clinic do not complain about their Western-style family doctor or even about the cosmopolitan medical system as such, but over 90% of the sample *did* express fear regarding the long-term ingestion of synthetic drugs. The term has been coined by the mass media to express this concern *yakugai* (drug pollution). Traditional practitioners and patients believe that by using traditional medicine they can avoid unwanted side-reactions. Other aspects which patients repeatedly stressed as important were that the healing process takes place gradually and therefore "naturally", that therapeutic techniques are mild and that the practitioner has time to treat each patient as an individual. The popular demand for traditional medicine is therefore a reaction against some of the things which cosmopolitan medicine is thought to lack.

#### LEGITIMATION OF TRADITIONAL PRACTITIONERS

Cobb analyses the legitimization process of a group as having five components: legal sanctions, academic sanctions, professionalization, social movements and popular demand [37]. In order to analyse the process of re-legitimation of traditional East Asian medicine, it is necessary to make a distinction between public support in the form of social movements and popular demand and that of institutional change. Institutional change can be further subdivided into that which takes place within the organization of East Asian medical practitioners (professionalization) and that which takes place in other institutions (legal or academic). Social movements and popular demand are in great evidence in Japan today: popular demand for traditional medicine is so apparent that the term *kanpō boomu* has been coined to express public interest in the matter. Social movements, such as housewives' consumer groups, environmentalist groups and many of the new religions, demonstrate concern with the side-effects of industrialization. They encourage a renewal of interest in things defined as "natural", which include traditional and popular medicine, and also in a rethinking of the relationship of people to nature, in terms closely allied to that expounded in the medical classics.

Both popular demand and social movements have been on the increase over the past twenty years and their existence was acknowledged in Japanese society before the implementation of recent changes in official attitudes towards traditional medicine. Despite the fact that public support for traditional medicine appears to be based upon support for some of the distinctive features of traditional medicine, institutionalized responses designed to broaden the legitimization of traditional medicine, in contrast, tend to be structured in such a way as to curtail many of the distinctive features of the traditional system.

Licensing of all medical practitioners has been required for at least 200 years. A national health insurance system has been in existence in Japan since the 1930's but no practitioner of East Asian medicine was allowed to participate in this system unless they were also licensed as an MD. Recently the government has responded to popular interest in traditional medicine

by allowing reimbursement to traditional practitioners through the socialized medical system. The initial move was to allow reimbursement to patients receiving acupuncture and massage from a licensed practitioner if referred by an MD; the latest change is to permit reimbursement for certain prescriptions of herbal medicine by *kanpō* doctors. So far, these are relatively small changes and demonstrate clearly the resistance of the Japanese medical association to innovation in this direction.

In the case of the acupuncturist or masseur, incorporation into the insurance system actually serves to reduce the ability of the practitioner to provide a style of therapy that the traditional belief system requires. Reimbursement to a traditional practitioner is only allowed for visits which take place within two months after referral. Since therapy and healing in the traditional system is expected to proceed slowly, often over many weeks and months, the practitioner who participates in the socialized medical system finds himself in a professional dilemma. Secondly, the practitioner is reimbursed only for therapeutic techniques that are performed on the patient but not for diagnostic techniques or for verbal communication, both of which should be an essential part of the interaction between traditional therapist and patient. (It is assumed that diagnosis in the cosmopolitan medical style made by the referring doctor is an adequate basis upon which the traditional practitioner can make a decision about the best traditional therapeutic procedure.) Recognition of traditional medicine and its legal incorporation into the established system of organization for medical care can, therefore, serve indirectly as a means to standardize medical practice and to make it conform more closely with cosmopolitan medical ideals. It also serves to enhance a reductionistic approach in the practice of traditional medicine. Some practitioners already offer this kind of service but participants in the popular revival of traditional medicine are looking for more than this.

Changes in attitude in academic support of traditional medicine tend to enhance a reductionistic approach. There has been consistent academic research into the therapeutic techniques of traditional medicine for the last hundred years in Japan and several major universities have departments of pharmacognosy. Most recently a large research institute has been opened in Tokyo, which is devoted solely to the analysis of traditional medical techniques and materials. This institute is partially funded by the government. There is academic interest therefore in traditional medicine, but only in connection with those aspects of it that may have scientific validity. As with the legal changes, so also the existence of academic interest does not necessarily lead towards an acceptance of traditional East Asian medicine in its own terms.

The last component of legitimization, that of professionalization, has been examined above. Since the status of the several therapeutic specialities in East Asian medicine remains hierarchical and asymmetrical, there is virtually no co-operation or sense of solidarity between, for example, the high ranking *kanpō* doctors and licensed practitioners of acupuncture. However, *kanpō* doctors do not see themselves in direct competition with licensed practitioners but rather



with cosmopolitan-style doctors. While their legal status is the same as that of a cosmopolitan doctor their social status has remained peripheral in official medical circles until very recently. Frequent exposure in the mass media has remedied this position considerably.

Between licensed practitioners with different therapeutic specialties competition is rife despite the fact that they have often been to the same educational institution and undergone a relatively standardized training. Practicing acupuncturists, shiatsu, and moxibustion specialists only very rarely refer patients to one another, do not attend the same conferences or co-operate in research. The only exception to this is when scientific research is undertaken within an established school of East Asian medicine. Even within the same therapeutic speciality factionalism is the rule. At the present time, therefore, professionalization of East Asian medical practice is not a dynamic force for centralization of power or for institutionalized changes to medical practice. The fragmentation, on the contrary, helps to maintain a pluralistic and flexible approach towards patient care.

In summary, pluralism within the traditional medical system allows practitioners to survive in a competitive environment. It also meets the needs of an urban Japanese public who hold a variety of belief systems and sustain various ontological orders. On the other hand, it serves to fragment the status of traditional practitioners as a corporate group and reduces their chances of maximizing their power as a professional body. The paradox remains that should the system become highly rationalized, tacit knowledge decried, and corporate power amassed, then traditional practitioners will run the grave risk of sacrificing many of those values and advantages, including the actual pluralism, for which patients turn to them.

For legitimation of traditional medical systems to be satisfactory, it must be done in such a way that values derived from the biomedical model are not incorporated as restraining forces. The corporate group should be organized and structured entirely separately from the cosmopolitan medical system. Only thus, given the overwhelming reliance at present on cosmopolitan medical principles, can traditional medicine be re-established with the facility to develop as an independent system.

Thoughtful people have suggested that "small is beautiful" for the future world of economics. In an age when chronic, geriatric, preventive and ambulatory care will dominate in medicine, then decentralization seems appropriate. This should be attempted not only within cosmopolitan medicine itself, but by allowing pluralistic forms of medicine to flourish in both industrialized as well as developing environments.

#### REFERENCES

1. The term East Asian medicine is used to refer to the medical beliefs which were dominant until the 19th century among the literate populations of China, Korea and Japan and which are usually referred to in the literature as classical Chinese medicine or Oriental medicine. When referring to the practice of traditional Chinese medicine in Japan, I use this term because,

although it has been uniquely adapted over the past 1300 years to Japanese cultural conditions, it nevertheless retains much of its original Chinese flavor. Dunn Fred L. (Traditional Asian medicine and cosmopolitan medicine as adaptive systems. In *Asian Medical Systems*, (Edited by Leslie C.), p. 135. Univ. California Press, Berkeley, 1976) defines this type of system as "regional" in that it is applied in several cultural settings and has a long scholarly tradition associated with it. In this respect, it is similar to the Ayurvedic and Yunāni medical systems.

2. World Health Organization. *World Health Statistics Annual*. World Health Organization, New York, 1977.
3. Bellah Robert N. *Tokugawa Religion: the Values of Pre-Industrial Japan*, p. 14. Beacon Press, Boston, 1957.
4. In the Japanese language the term faction (*ha*) is applied to these schools of medicine. I have retained this term because the schools view themselves as rivals and develop some differences in theoretical ideas which influence the actual practice of medicine. While one group (the *goseiha*) retains a strong adherence to classical textual theories, the other (the *kohōha*) specifically rejects such fundamental concepts as the five phase theory (see Porkert M. *The Theoretical Foundations of Chinese Medicine*. M.I.T. East Asian Science Series, Vol. 3, M.I.T. Press, Cambridge, 1974) and each faction adapts existing texts, produces new texts and selects its teaching techniques according to these different theoretical approaches. Ōtsuka Y. (Chinese traditional medicine in Japan. In *Asian Medical Systems*, op. cit.) and Fujikawa Yū (*An Outline of Japanese Medical History*, Vol. I. Heibousha, Tokyo, 1974. Japanese text) furnish accounts of the historical development of medical factionalism in Japan.
5. Fujikawa Yū. *An Outline of Japanese Medical History*, Vol. I. Heibousha, Tokyo, 1974. (Japanese text.)
6. Janzen J. The comparative study of medical systems as changing social systems. *Soc. Sci. Med.* **12**, 121, 1978.
7. Fujikawa, *ibid*.
8. By folk medicine is meant the practice of medicine in which theory is not derived solely from a scholarly tradition and in which there is not usually a coherent body of ideas regarding a wide range of medical activities. Treatment is frequently limited to a few procedures and oral medication is not given in the form of a complex prescription but simply consists of one or two ingredients issued to counteract specific symptoms. This distinction between folk medication and medication of the East Asian medical system is made in the Japanese language (*minkanyaku* and *kanpōyaku*). Folk medicine is practiced by professional therapists such as shamans, priests or fortune tellers and is distinct from popular medicine (see [17]).
9. Casal U.A. Acupuncture, cautery and massage in Japan. *J. Asian Folklore Stud.* **21**, 221, 1962.
10. A cauterization technique in which the herb (*Artemisia vulgaris*, mugwort) is burned on the body at designated points for therapeutic purposes.
11. Janzen, *ibid*.
12. Bowers J. Z. *Medical Education in Japan: From Chinese Medicine to Western Medicine*, p. 8. Harper & Row (Hoeber Medical Division), New York, 1965.
13. Lock M. *East Asian Medicine in Urban Japan: Varieties of Medical Experience*, pp. 173-175. Univ. California Press, Berkeley, 1980.
14. *Kanpō* literally means the "Chinese way". It refers to the entire medical system brought to Japan from China in the 6th century. In modern Japan, it is also used to refer to the application of herbal medicine as distinct from acupuncture, moxibustion and massage. Any clinic which makes herbal therapy the center of its medical system is defined in Japan today as a *kanpō* clinic.

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15. The medical system usually referred to as "western", "scientific" or "modern" will hereafter be referred to as "cosmopolitan" in accord with the argument put forward for use of this term by Dunn Fred L. Traditional Asian medicine and cosmopolitan medicine as adaptive systems. In *Asian Medical Systems*, (Edited by Leslie C.), p. 135. Univ. California Press, Berkeley, 1976. p. 135.
16. The data upon which this part of the paper is based was obtained through interviews and observations carried out within twelve clinics of East Asian medicine. 15 practitioners and 200 patients were interviewed concerning their medical beliefs and practices. Five of the practitioners are MD's, the rest are licensed to practice traditional medicine. Interviews were also conducted within 50 Kyoto families regarding attitudes towards health and illness.
17. The term popular medicine is used to cover self and family health care practiced in informal and family settings as opposed to other types of medicine including cosmopolitan, East Asian and folk systems in which a visit to a professional medical practitioner is involved.
18. Lock, *op. cit.*, p. 113.
19. If, when patients arrive at a *kanpō* clinic, they are taking a course of synthetic medicine it will be completed, but a transition to herbal medicine will then be made.
20. See Porkert M. *op. cit.*, for a complete explanation of traditional concepts.
21. Lock, *op. cit.*, p. 218.
22. Young A. Some implications of medical beliefs and practices for social anthropology. *Am. Anthropol.* 78, 5, 1976.
23. Doi T. *The Anatomy of Dependence*. Kodansha International, Tokyo, 1973.
24. Lebra T. *Japanese Patterns of Behavior*. Univ. Press of Hawaii, Honolulu, 1976.
25. Lebra, *ibid.*, p. 38.
26. Lock, *op. cit.*, p. 235.
27. Reich M. and Kao John J. (Eds) *A Comparative View of Health and Medicine in America*, p. 8 Japan Society, New York, 1979.
28. Porkert, *op. cit.*
29. Lock, *op. cit.*, p. 127.
30. Lock, *op. cit.*
31. A type of massage which was developed in Japan and given its present name in the 19th century. Principles from the martial arts are included in its theories.
32. Leslie C. The professionalization of Ayurvedic and Unani medicine. In *Medical Men and their Work: A Sociological Reader* (Edited by Freidson E. and Lorber J.), p. 50. Aldine, Atherton, Chicago, 1972.
33. Lock, *op. cit.*, p. 134.
34. Unschuld Paul U. Medico-cultural conflicts in Asian settings: an explanatory theory. *Soc. Sci. Med.* 9, 304, 1975.
35. Lock, *op. cit.*, p. 175.
36. Namihiro E. and Sanches M. Hare, Ke and Kegare: cognitive categories of socio-cultural experience. Paper read at the 76th Annual Meetings of the American Anthropological Association, Houston, Texas, 1977.
37. Kuckelman Cobb A. Pluralistic legitimation of an alternative therapy system: the case of chiropractic. *Med. Anthropol.* 1, 1, 1977.

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## THE THERAPIST-SPIRITIST TRAINING PROJECT IN PUERTO RICO: AN EXPERIMENT TO RELATE THE TRADITIONAL HEALING SYSTEM TO THE PUBLIC HEALTH SYSTEM\*

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**Abstract**—This paper describes a project that attempts to integrate two healing systems by providing their practitioners with a means of continuous contact. Spiritist healers, mental health workers and medical and other health professionals meet on neutral academic ground provided by the program. So far, organized groups of practitioners from both systems have met over three 10-month periods to interchange ideas and discuss cases. From the inception we planned to use unscheduled outcomes as they emerged through the interactions of participants. Participants express anxiety about the lack of direction in this procedure but it has been effective. One project goal appears valid on preliminary consideration, in that therapists and Spiritists have begun to refer patients to each other; in some cases they have even consulted each other about their own personal problems.

### INTRODUCTION

Although there are studies of medical pluralism in Western societies, relatively few describe projects that seek to integrate non-medical healing with the system of licensed medical practice [1-4]. Foremost among the current programs dealing with medical pluralism are the Miami Health Ecology Project [5,6] and the Newark Health Ecology Project [7]. Both are based on a model developed by Weidman [8] of the "cultural broker", a social scientist liaison of the same ethnic background of the various subcultural groups (and their healers) seen in a Community Mental Health Center compartmentalized by ethnicity.† Although the Newark project advocates knowledge of healers and their practices as an entry into the ethnic communities, and as necessary to clinically-based, culturally-aware services, it is not clear whether either project has integrated traditional healing practices with mental health services. A project based at Lincoln Hospital did advocate bringing healers into the CMHC setting but its authors have not given details on the program's design or outcomes [2,3].

We report on the first phases of an ongoing experiment between the major traditional healing system in Puerto Rico—Espiritismo—and the public health system. The specific initial goals of the project were to intensify and structure communication between healers in the traditional system and health and mental health professionals, and compare the outcomes of these different systems. Such comparisons will help planners and clinicians develop programs to improve health care delivery for particular clients and specific complaints.

### SPIRITISM IN PUERTO RICO

Espiritismo is a religious and philosophical healing system widespread in Latin countries [10-15]. It was originated in France by Leon H. Rivail who published seven books and a journal under the *nom de plume* of Allan Kardec. Rivail died in 1869 but his writings were widely disseminated in Spain and eastern Europe, and subsequently to all of the Latin countries. Spiritism initially appealed to intellectuals who studied in Paris and Madrid [10]. It took hold in the upper class in Puerto Rico, and filtered down to the working class and rural people who combined it with *curanderismo* and other practices of African and Amerindian origin.

The ideology of Spiritism in Catholic, but anticlerical. It has been transformed to include a pseudo-Hindu idea of the evolution of the spirit as a "natural" process. Leon H. Rivail reinterpreted the Bible to claim that Jesus and the saints were highly evolved spirits close to the throne of God who represented the ideal end of reincarnation in everyone's karmic destiny.

The spiritist world is composed of classes of spirits arranged in a pyramid from "criminal" spirits who died in an untimely or unseemly fashion, to the all knowing, all good Universal Spirit. Natural aspirations are to be good but people are always exposed to suffering caused by criminal, backward, or misguided spirits known to them in a former existence. To overcome and guard against harmful spirits, one can come into closer contact with one's guardian angel and with spirit-guide protectors of various sorts. Particular persons develop powers to communicate with spirits through a personal spirit-guide protector, and they develop a cadre of spirit guides who confer special powers to prescribe medicinal plants or to transport their personal spirits to distant places. Development of such power usually follows a period of suffering which is viewed as a "test" to be overcome if the person is to qualify as a medium. Mediumship requires an exemplary "clean" (high moral) life, and

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† Garrison has revised the model to include a "cultural specialist", a social scientist not necessarily of the same ethnic background as clients but thoroughly knowledgeable of the clinically represented cultural variety [9].



dedication to helping others. Everyone is believed to have the potential ability to communicate with and to see the spirit world.

Although Leon Rivail, alias Kardec, systematically distinguished types of mediumship, he did not emphasize healing practices. However, in Puerto Rico, Spiritist practice is focused upon the medium as a counselor and healer who can exorcise illness-causing spirits and assist clients to acquire enlightened spirit guides and protectors. The Spiritist movement transformed and legitimized the nineteenth century *curandera* who was under heavy attack from medical authorities.

Perhaps because of the opposition of medical authorities to spiritism as a popular healing system, practitioners always differentiate the "material" from the "spiritual" causes of the problems their clients present. Most Spiritist healers ask about the patient's medical history, and they often recommend a "check" by a physician, sometimes even by a specialist. The results are to be reported to the healer at a subsequent visit. The healers' attitude toward mental illness is that many cases are spiritually caused. Cases are distinguished from each other by "fluids" or "messages" communicated nonverbally by spirits. (The complex cues for distinguishing the spiritual etiology of aberrant behavior or physical symptoms are beyond the scope of this paper.) However, we should note that many problems, since they comprise emotional, interpersonal, intrapersonal and social aspects, are considered to be caused by both material and spiritual conditions. The implications for case-sharing are clear to the Spiritist healer but not usually known to the physician who treats the Spiritist's client.

Given this cosmology of the spirit world and the denial of the role of intermediaries in one's spiritual life, it is not surprising that the Catholic Church and many Protestant denominations have waged war against Spiritism. The strength of the attacks diminished when Spiritism was not too visible at some periods in Puerto Rican history. Although many Spiritist believers are also good mass goers, the increased visibility of their practices during the past 10 years [10] is again drawing fire from the Catholic Church and the fundamentalist churches.

In contrast, at least some avant-garde physicians interested in community health have observed that Spiritist healers play an important role in the prevention of mental illness and the care of the mentally ill, especially since the healers are available in every urban neighborhood and rural barrio. In their important epidemiological study of schizophrenia, Rogler and Hollingshead [16] suggested that Spiritist healers not only provided support but functioned as psychotherapists. This idea has received a mixed, often ambivalent, reaction from the majority of Puerto Rican psychiatrists. (The term psychotherapist is a misnomer when applied to Spiritist healers; "psychic therapist" or "spiritual therapist" would be more appropriate.) Despite considerable opposition from many physicians, and a widespread suspicion that

Spiritists do more harm than good by diverting patients who need medical attention, there are a number of clinicians in public health programs who consider Spiritism a community health resource. Their support can be explained by many factors. First, many medical doctors come from families of several generations of Spiritist believers or healers, or have married into such families. This has led to a rejection of Spiritist healing practices by some after their resocialization as health professionals, to continued ambivalence in others, or to an open attitude and curiosity about the phenomenon by still other physicians. Ten of the 48 physicians in private practice and public health interviewed are knowledgeable of spiritist healing practices and sometimes incorporate a few of them into their private medical practices without presenting them as related to Spiritism. A few medical doctors (I have good information on 5) are also Spiritist healers and employ both healing strategies—although in different settings. Their dual orientation is well-known to their patients who comment that these physicians are more sought after than those who do not incorporate Spiritist practices.

New medical views on the major presenting symptoms and disease load in Puerto Rico have generated widespread agreement that mental health problems are the most serious concern of both public health and private practitioners,\* and that there is a relationship between these problems and the increasing number of psychosomatic illnesses presented at health clinics. Given the serious problems of cost-effective health delivery, budgetary deficits, a growing population, and the greater prevalence of diseases like coronary malfunction and cancer, responsible public health officials have turned some of their attention to overall community conditions, including a consideration of the traditional, popular techniques for dealing with health problems.

#### THE FORMAL AGENDA

The general objectives of the initial proposal were: (1) to establish a forum for the meaningful exchange of information between the two healing systems (Spiritism and community mental health); (2) to offer a training curriculum to provide needed skills to the members of each system; and (3) to develop new psychotherapeutic approaches from a synthesis of the most relevant and effective healing techniques in each system. In this paper, we will elaborate mainly on the first of these objectives.

A group of Spiritist healers and health professionals met in seminars of 6 hr per week during three 10-month academic years in three catchment areas of the western (and largest) health region in Puerto Rico. For 2 years the seminars were based in the Community Mental Health Centers (CMHC) with a few participants from nearby hospitals and public health clinics. The third year program is based in an area hospital and integrated with the CMHC of the community. Well known Spiritist healers and full time health professionals from the staff of seven public health institutions were recruited during the spring and summer months prior to each seminar program. Sociodemographic data, a health status questionnaire, life history materials and several measures assessing their view

\* News releases from Dr Jaime Rivera Dueño, Secretary of Health of Puerto Rico, between January and June, 1979, in *El Mundo* and the *San Juan Star*, have stated this position.

and treatment of clients and patients (and profiles on their client/patient populations) were gathered from prospective participants. Treatment measures were gathered again at the end of the seminars. Many other health professionals, Spiritists, and community leaders (including clerics) also participated in the seminars but dossiers of information were only gathered on the core participants.\*

The seminars were divided into two programs: the first weekly conference session included two lecturers; a health professional and a Spiritist healer. The second weekly session consisted of discussions of cases seen in the public health clinics compared with matched cases seen by Spiritists in individual consultations or in group healing sessions. All seminars were held in the public health institution where the project team was based. It was originally planned to rotate meetings to a Spiritist center, but this proved impractical. The disadvantages to the Spiritists were outweighed by the prestige and legitimization this lent to the activity. Since their practices have been denigrated for decades by authorities in biomedical health institutions, their initial lack of ease in the public health setting was soon offset by its symbolic value as a sign that their participation had official sanction.

The specific content of each seminar varied according to the lecturer. The program format explored six themes over 36 weeks: anthropological perspectives on traditional and modern health systems; comparison of techniques in psychotherapeutic and Spiritist practices; diagnosis and problem definition in psychiatry, psychology, Spiritism and social work; approaches to organic brain syndromes, physiological bases of emotional disorders and psychosomatic illnesses compared to Spiritist views of these syndromes; pharmacology of common drugs and use of herbal medicines; and referral systems in public health and Spiritism, including a description of programs and services in a particular catchment area. Discussion of the topics was encouraged; readings were regularly distributed.

#### THE INFORMAL AGENDA

The didactic aspect of the program was its flexibility, though major changes in format were not necessary. The sensitive and important aspects consisted in the planned informality. The program was structured to offer information on concepts and skills in addition to information on Spiritist belief and practice to health workers, and the obverse to the Spiritists. The formal agenda was set up for the express purpose of holding the interest of the participants and eliciting their explanations of health delivery perspectives and practices. The specific goal of the seminars was to provide a significant meeting place and to encourage an open attitude and inquiry into concepts and techniques used in treating patients/clients.

\* Three Protestant ministers and three priests attended the seminars for short periods only. One priest remained interested over several months and was extremely negative about the hospital's interest in Spiritism.

† This discomfort was not openly expressed; video tapes of the seminars are now being analyzed for interpretation of patterns of interactions between Spiritists and therapists.

Each session included a "coffee break". This period for socializing gave Spiritists and health professionals an opportunity to get to know each other to resolve feelings of hostility and annoyance that might arise in the group discussions. It was also designed to mitigate feelings of uneasiness that Spiritists expressed when recruited—especially those who felt stigmatized by their lack of formal education.

Frequent questions from participants were: "Do we want the Spiritists to work in the clinics?" or, "Do we want the therapists to believe in or use Spiritist techniques with their clients?" The consistent theme was not to impose ideas on either group. This approach permitted maximization of freedom of choice once information about the alternative system was provided. Participants were told that they should decide whether the new ideas and techniques fit their clinical situation and make their own test for effectiveness.

#### THE PARTICIPANTS

The sex ratio of participants was approximately the same each year, averaging about two-thirds women at each seminar. (Table 1 describes the participants.) This reflected the demographic pattern in Puerto Rico for service professions or avocations.

Men, although fewer in number, frequently dominated the discussions and were generally accorded more respect. The social relations among therapist staff groups, and among Spiritist healers reflected general values of male authority even where women were represented as better healers or health professionals.

A "psychosocial technician" in the CMHC system must have a B.A. degree. The participating therapists also included clinical psychologists and social workers with M.A. degrees, as well as graduate nurses and doctors. In comparison, nine of 36 Spiritists had university educations—six were teachers (three retired), one a lawyer, one an accountant, and another a school counselor (also retired). Twenty-seven Spiritist healers had only an elementary school education and they expressed feelings of inadequacy and modesty reflecting low social status. These feelings of discomfort subsequently diminished and some healers were eventually deferred to by some of the therapist-professionals.

After 4-5 months of each program, about half of the therapist group originally recruited gradually stopped attending. Those who dropped out said they had competing familial and educational obligations. In follow-up interviews, one third of the first two therapist groups said that the seminars, and the Spiritists' contributions in particular, became repetitive and boring. Administrators at these institutions observed that the therapists' loss of interest could be accounted for by their discomfort when confronted with the sincere, highly motivated, committed attitudes of the Spiritists toward their helping roles.†

The two groups show many differences in attitudes towards their "work", although most of the participants have come from the same sector of Puerto Rican society. They should have the same capacity to understand (and include in their intervention procedures) the psychocultural matrix of their patients' difficulties. However, they have very different definitions of their healer roles which lead to different treat-

Table 1. Core participants during three project years

Therapists			Spiritists		
Sex	Age	Occupation	Sex	Age	Occupation
<i>Group I</i>					
Female	27	Psychosocial tech.	Female	46	Teacher
Female	30	Aux. psychotherapist	Female	47	Housewife
Female	40	Social worker	Female	49	Retired Teacher
Female	42	Graduate Nurse/Supervisor	Female	54	Caterer-Self Employed
Male	23	Intern-Clin. Psychology	Female	61	Housewife
Male	27	Aux. Psychotherapist	Female	69	School Counselor Retired
Male	28	Clinical Psychologist	Male	44	Auto Repairman
Male	28	Psychosocial Tech.	Male	45	Merchant
Male	29	Psychosocial Tech.	Male	48	Teacher
			Male	61	Recreation Supervisor
			Male	72	Retired Construction Worker
<i>Group II</i>					
Female	24	Clinical Psychologist	Female	40	Housewife
Female	25	Director of Juvenile Program, District Court	Female	40	Housewife
			Female	42	Housewife
Female	26	Psychosocial Tech.	Female	45	Housewife
Female	27	Graduate Nurse	Female	55	Housewife
Female	28	Director Project "Hope"	Female	57	School Teacher
Female	28	Graduate Nurse	Female	80	Housewife
Female	36	Psychosocial Tech.	Male	42	Taxi Driver
Female	38	Psychosocial Tech.	Male	47	Accountant
Female	45	Social Worker	Male	58	Salesman-Lottery Tickets
Male	27	Inter-District Health Center, M.D.			
Male	40	Social Worker			
Male	46	M.D. In-Patient Psych. Hospital			
<i>Group III</i>					
Female	24	Psychosocial Tech.	Female	33	Clerk
Female	24	Pharmacist	Female	46	Lawyer
Female	26	Graduate Nurse-Dist. Hosp.	Female	50	Housewife
Female	27	Graduate Nurse-Dist. Hosp.	Female	52	Nurse
Female	28	Graduate Nurse-Dist. Hosp.	Female	53	Teacher
Female	38	Graduate Nurse-Dist. Hosp.	Female	54	Cafeteria Worker
Female	39	Chief-Nursing-Dist. Hosp.	Female	55	Housewife
Female	40	Psychosocial Tech.	Female	56	Housewife
Female	42	Psychosocial Tech.	Female	57	Practical Nurse
Male	25	Psychosocial Tech.	Female	58	Housewife
Male	28	Social Worker	Female	64	Housewife
Male	29	M.D. Resident-Dist. Hosp.	Female	65	Housewife
Male	42	Social Worker	Male	35	Unemployed
			Male	48	Public Utilities Worker
			Male	50	Teacher

All persons are employed at a CMHC unless otherwise noted.

ment perspectives [12]. The degree to which the two therapies are "relationship oriented" differs in that Spiritist therapy includes powerful emotionally charged aspects. (See Table 2 for a comparison of aspects of the two types of therapeutic relationship.) Community mental health care provides support on a sporadic basis (usually once per month if not in day care or hospitalized); in contrast, the Spiritists live in the communities of their clients, are generally successful in mobilizing relatives and friends to attend to the client, and are themselves readily available.

Approximately one fourth of Spiritist participants in each group also dropped out of the program. The stated reason of the dropouts was discomfort with the academic approach, which they felt put them at a disadvantage. The Spiritists who did have a formal

education tended to dominate seminar discussions, therefore, healers with university educations may be over-represented if our participant groups are considered representative.

#### RESULTS AND CASES

The general objectives of the project have changed in the course of two-and-a-half years. Programs have been expanded to include hospital-based health professionals in addition to community mental health workers.\* The list of major objectives has been expanded to include the organization and implementation of service units for referrals of clients between Spiritist healers and the CMHC clinics. In addition three auxiliary seminar programs for the training of house staff, and for continuing education, have been organized at the request of public health hospitals and regional health centers. These seminars explored some of the same themes but were more condensed.

\* Data on the third year program is just being analyzed. Discussions in this section pertain, in many aspects, to the first 2 years.

Table 2. Comparison of client-healer relationship in Spiritism with that of CMHC treatment

Psychotherapy		Spiritism
<i>Diagnostic process</i>		
a.	Screening interview	Spiritist observes client
b.	Patient describes problem	Spiritist describes client's difficulties as caused by spirits
c.	Therapist awaits verbal production of patient to make the diagnosis	Spiritist feels or senses client's problems nonverbally; he/she "captures" the client's symptoms
<i>Practitioner-client characteristics</i>		
a.	Therapist perceived to be of a higher social class than patient	Spiritist usually of same social class as patient
b.	Therapist's role validated by education and professional status	Spiritist's role validated by special personal experiences, ecstatic, etc.
c.	Therapist considered to be authority but readily cooperative, although also capable of misjudgment	Spiritist is a vehicle of divine authority and much more powerful than client
d.	Therapist frequently a young adult—male or female but more females	Spiritist usually an older female (three females to every male healer)
e.	Therapist's qualification is knowledge about people and science but possesses only a limited amount of empathy	Spiritist has special knowledge of invisible world and much empathy
f.	Therapist judged to be a normal, middle class person	Spiritist has unusual, not altogether normal, attributes
<i>Treatment</i>		
a.	Patient receives advice and recommendation for psychotropic drugs as primary treatment mode; some psychotherapy scheduled, usually on a once per month basis	Client receives valuable but not central advice; treatment consists of personal rituals (i.e. prayers, etc.) and exorcistic rites by healer; herbal preparation in some cases
b.	Focuses on adaptation and amelioration of conflict; suggests practical solutions like getting on welfare	Changes in style of coping insisted upon and also extensive personal transformation for some clients
c.	Therapist may or may not decide to mobilize family help	Spiritist may decide to call in family and almost always includes near or extended family in diagnosis
d.	Therapist may choose to discuss relevance of problems to general meaning of life, but rarely does	Most Spiritist treatment deals with life and cosmological meaning



Given the vast differences in educational background and interest between some Spiritists and health professionals, it was difficult to offer consistently meaningful course content in psychiatry, psychology, medicine or anthropology to the joint group; the content had to be simplified to reach most of the Spiritists or its appeal remained limited to the health professionals. To hold the interest of the participants, a plan was adopted to thread the lectures with discussions of Spiritist ideology and the nature of therapeutics and patient-practitioner relationships in all of the modalities represented among the participants. This was effective for many of the participants, but the most successful plan for communication was the opportunity for informal socializing.

An unplanned result of this socializing has been the receptivity of the therapists to Spiritists' interest in their (the therapists') personal problems. Spiritists feel they *must* communicate the messages or "fluids" they are receiving, especially if a serious illness or accident must be diverted or treated. On three occasions Spiritists spontaneously diagnosed problems of the seminar participants during a seminar session. The spiritual "working" of a problem during the seminar was highly unusual, however.

The therapists' respect for the healers as a possible source of help for their own problems in time seemed to bring about a status reversal. This can be traced to two interrelated differences between the Spiritists and the therapists. The Spiritists were almost all older than the therapists (therapists averaged 29 years, Spiritists 43 years), devoting much of their later years to developing as healers. Their lives have acquired significance through the devotion of their calling. In contrast, most of the relatively young therapists are "trying out" a profession and it is obvious that many are still not fully committed. (Most of the young interns presently attending a seminar, are exceptions to the above.)

In general, Spiritist clients found their healing sessions to be more meaningful than did therapist clients. The beliefs underlying each system either are meaningful as part of the psychocultural backgrounds of clients or can become meaningful through a special healing experience. A healing event in the Spiritist system relates to other aspects of life, like maintenance of health and moral decisions. Psychotherapeutic healing does not usually impact on the patient in this way since his expectations of being cured are limited to a particular set of precipitating complaints.

It followed that the Spiritists very often proselytized the therapists, though most frequently in an implicit rather than explicit way. In return the therapists could only "sell" their ideas and techniques, which seemed far less convincing. Some therapists reported their discomfort over the Spiritists' popularity and this may have precipitated their dropping-out.

Some therapist and Spiritist participants (as well as members of the project staff) began using the alternate system for their own problems within 3-4 months after initiation of the project in each institution. Of the first group, eight project staff members (including one lecturer) and four therapists consulted four of the Spiritists; two Spiritist participants (a couple) entered therapy with one of the therapist participants. In the second and third years, four of the mental health

therapists and six of the doctors and interns consulted four of the Spiritists for their own or relative's problems. Four Spiritist participants also self-referred to therapists and doctors participating in the project. (These cases are only those known to the project staff because they were used as consultants or intermediaries during the time seminars were taking place.) Case I describes the self-referral of one therapist.

Raul is a young, capable psychologist of 27 years at the outpatient clinic of the CMHC. Married, with a 4-year old son, he had great marital difficulties. He consulted a Spiritist participant, then precipitated a divorce. While the difficulties of common property and visitation rights were being debated, he saw the Spiritist on a regular basis. My impression was that her counsel was at least as effective as the protective spirits she marshalled to his side to help win the court battles. Her greatest effect was keeping his anxiety level low, especially by predicting the positive (for him) outcome of difficult interactions with his ex-wife.

He has continued to use this particular healer as confidant and counselor. Nine months later another problem arose in relation to a fiancée. The healer counseled both of them. After working through their relationship, Raul married again. He reported that he felt his Spiritist counselor to be far more effective than mental health professionals available to him.

Eight or more health professional participants have enjoyed a continued relationship to a Spiritist as a friend and personal counselor. In the case of Raul, the Spiritist returned the compliment by consulting him at the clinic about *her* marital problems and later brought her husband to therapy.

After several months of participation in the project, some therapists and Spiritists began to bring their relatives to practitioners in the other system. Maria had raised a nephew as her son. She had worked spiritually on this boy, a youth of 17, for several years but felt that she had had little success. He was withdrawn and related poorly to the family. His friends seemed to be delinquents; she had caught them smoking marijuana. What disturbed her most, and what appears to have been the precipitating factor in her bringing him to the CMHC, was her discovery of what she interpreted as homosexual behavior.

In the case of Maria's nephew, two factors were important in her seeking psychological services: first, the difficulties inherent in working with the boy in combination with disturbed relations between her and her husband; and second, the very traditional morality of spiritism condemns homosexuality as "unnatural," but claims tolerance of deviant behavior because the client is not responsible for its inception.

Therapists and Spiritists also began to refer patients to the alternative system (see Table 3). The Spiritists did so less frequently and more reluctantly than did the therapists. Therapists referred clients who talked about their involvement with Spiritism and certified that they or their relatives were believers. Clients were also referred to a Spiritist if the therapist felt that his efforts did not produce the desired changes, if the client indicated some interest in Spiritism, and if the client's family consented to the referral.

Anna, a girl of 19 years, was diagnosed as schizophrenic in an acute psychotic crisis. She was living

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with her parents and studying a secretarial course. The parents testified that she seemed to be a happy normal girl before the (in their view) sudden onset of symptoms. One day Anna stopped eating, seemed unable to sleep, refused to talk and alternately was depressed and had visual hallucinations. When brought to the CMHC, she was incontinent, and was unable to dress herself or take care of personal needs. Sedation and daily therapy sessions in the inpatient unit produced some improvement of behavior in several weeks. However, her therapist (a young woman trained in social work who had not participated in the project because she was new to the CMHC staff) was disturbed by the consulting psychiatrist's decision that if Anna did not improve more rapidly, he would have to prescribe a high dosage of antipsychotic medication. The psychiatrist's concern was that she could be discharged by the end of the 40-day limit on such hospitalizations. After Anna's mother mentioned her belief that Anna might receive some help from Spiritism, the therapist arranged a session for Anna and her parents with one of the Spiritists who had participated in the project. The project staff witnessed a 3-hr "work" by five mediums with Anna in which eight *causa* spirits manifested and seven laid the blame for Anna's problems indirectly on her parents. We watched changes of facial expression in Anna from an absent look to some attention and finally to an expression of affect or even perhaps understanding. The therapist reported that Anna had improved remarkably by the very next day and she was discharged a week later happily talking about her future plans to finish her course and marry her boyfriend. Her parents refused to return with Anna to the Spiritist session despite her obvious improvement.

The 10 cases in Table 3 are half of the referrals in both directions that occurred during the last 2½ years of the seminar programs. Referrals listed were made by project participants to or from the CMHC's or, in regard to two patients, by M.D.s who diagnosed the patients as having severe emotional disturbance. The major reason for referral was the therapists' or M.D.'s feelings regarding the limitations of their therapeutic methods for these particular patients. The major impact of the seminars was that Spiritism came to be seen as another possible resource when patients did not respond in expected ways. All of the referrals made by therapists had severe and chronic problems of emotional distress; those by Spiritists also tend to be the more severe cases especially clients who were too aggressive and disturbing to their families. Therapists who participated in the seminars tended to be more open to clients' beliefs in Spiritism. Several of their clients asked to be referred to an *espiritista*. These clients frequently were bothered or upset by intimates who had died or by fears of evil spells. M.D.s who participated in the program came to see Spiritism as an alternative to mental health services if the patient professed belief and, in particular, needed supportive follow-up care. Spiritists were not used as a substitute for hospitalization but rather for ambulatory cases for whom the control of emotional distress would then permit better compliance with a medical regime.

Several participating therapists, after being recruited into the project, revealed that they had familial

or personal experience with Spiritism and were confused about the extent to which they could or should interrelate their experiences and knowledge about Spiritism with their professional roles. After participating, three therapists decided that they *could* incorporate some techniques without doing violence to their professional integrity; two therapists were reconciled to and began to appreciate their spouses' interests in Spiritism; and in three additional cases, therapists who were very negative about the involvement of an intimate family member with Spiritism resolved the conflict enough to be able to say that they would refer clients whom they could not help and who declared themselves to be Spiritist believers.

One example was Pablo, a 28-year old male therapist who had been a seminarian before becoming a psychotherapist/technician. Pablo's mother and aunts, who had played major roles in his early life (his mother divorced his father when he was 9 years old), were all practicing Spiritist mediums. Pablo, not unlike many children of Spiritists, was both awed and repelled. From his account, it seemed that a need to reject his mother was expressed in his disgust over her Spiritist activities, which he claimed had more harmed than helped her. Pablo admitted that he joined the project to attempt to reconcile ambivalent feelings about Spiritism. After about 3 months he brought his mother and aunt to the meetings and subsequently attended a special Spiritist session accompanied by his mother, her sisters and his fiancée. Later he said that he could never use Spiritist techniques himself, but he did appreciate the potential benefit of a referral to a patient who was a believer.

In several cases (only two can be documented), one of the therapist participants referred another therapist to a Spiritist healer-participant instead of referring the therapist (as a client) to mental health services. The best example of this pattern was the case of Rosa, a woman of 45 and a therapist in the CMHC:

Rosa had had contact with Spiritism as a result of difficulties she experienced with her mother, who, according to Rosa, tried to commit suicide and was psychotic. Rosa, divorced with five children, was presently living with a boyfriend. She sought help for problems from two Spiritists. One night she reported "feeling O.K., but I took some pills and sat on the bed and asked my boyfriend to give me a Mellaril®. I promised to quarter it but didn't and took it all." Rosa then fell into a deep sleep but awakened in the morning and started out to accompany her boyfriend on an errand to a neighboring town. On the way, however, she lost consciousness and was taken to the local health clinic. The physician in charge also happened to be a participant in the project. After washing out her stomach and questioning her about the possibility of attempted suicide, he suggested that she be taken to the mental health center. She pleaded with him not to go because of fear of losing her job. He then called the two Spiritists whom she had previously consulted. They took her to their home and subsequently treated her in their next *centro* session. She reported that they raised three spirit *causes* and explained that *she* did not swallow the pills, but that a spirit was acting for her. The spirit diagnosis was "obsession".

The physician reported that he had not referred her to the mental health center because of her fears and

Table 3. Referral cases in dual treatment

Sex	Patient Age	Referred from	Referred to	Presenting complaints	Diagnosis (medical)	Diagnosis (spiritual)	Reasons for referral
1. F	19	CMHC	Spiritist Center	Insomnia, tachycardia, dissociated, confused, aggressive, poor memory, excessive fatigue, pain in throat and back, appetite loss, fear of death, no speech, visual hallucinations	Schizophrenia (simple)	7 <i>Causas</i>	Mental health worker unable to get rapid improvement
2. M	39	Spiritist	CMHC	Insomnia, very agitated, grits teeth, violent with family, poor memory, unemployed for 6 months, screams and cries, breaks things, delusion that he is "Son of Sam"	Schizophrenia	"Causa mental"	Spiritist felt client to be too aggressive after some spiritual help
3. M	77	Dept of Medicine, (Reg. Hosp.)	Spiritist	Cough, phlegm; appetite loss, general weakness	Chronic lung inflammation possible malignancy	<i>Causa</i> that wants client to die	Refusal to eat or cooperate with doctors for tests
4. M	27	Dept of Medicine (Reg. Hosp.)	Spiritist	Fever, stiff neck	Meningitis "acute psychosis"	Spiritual <i>causas</i>	Inability to bring about change in patient's behavior
5. F	26	Spiritist	CMHC	Unable to work, poor relations with men, (abandoned 3 times with small children, extremely dependent on mother	Schizophrenia	<i>Causas</i> in general	Dissatisfaction with public in-patient facility so mother (a believer) sought Spiritist who referred to CMHC day care

6.	F	35	CMHC	Spiritist	Mind went blank, suspicion of harm from friends (delusion), marital problems	Schizophrenia, undifferentiated; or hysteria	Psychotherapy doesn't seem to be helping, "no progress with insight"; witchcraft fears referred to Spiritist
7.	F	43	CMHC	Spiritist Center	Many psychosomatic complaints; extreme pain on left side of body	Depressive reaction	Another source of help because patient was a believer
8.	F	43	CMHC	Spiritist Center	Nervous, severe headache, bad humor, depressed; insomnia, marital problems	"Depression"	Believer in Spiritism; thinks she is developing mediumistic powers
9.	M	24	CMHC	Spiritist Center	Suicidal, weak, failure to speak, depressed	Schizophrenia	Lack of progress in treatment in day care; anti-psychotic medication not working  Spiritist recommends hospitalization, but that a possessing spirit is the <i>causa</i> and patient has a "weak spirit" that cannot fight
10.	M	47	CMHC	Spiritist Center	Extreme trembling (especially of stomach and hands), difficulties at work	Deferred	Onset at time of father's death; has had visions of both dead father and a deceased uncle. Client believes that he hasn't received help; therapists feel that coordination will help



because of past dissatisfaction when he had referred another case of attempted suicide. Emergency had sent the client home with an appointment for the following day. He felt that such patients can repeat the suicide attempt and need more attention.

Some weeks later, Rosa called a meeting of her supervisor and some medical students working at the mental health center at the home of the Spiritists who had treated her. The ostensive reason was that the Spiritists would demonstrate how they dealt with attempted suicide by playing a tape they had made at the session at which Rosa was treated. No-one was supposed to guess that the client was Rosa, but the information was only thinly disguised. Rosa seemed to want her supervisor to know what had happened, perhaps to advance the Spiritist explanation that she was not responsible for possible suicidal behavior. She reported to me that she knew the pills she took would not have killed her. This was unclear to her boyfriend and physician, however. She also claimed not to remember what had transpired at the health center or at the Spiritist's home, thus substantiating the idea that spirits had taken over her consciousness.

In the above case it appears that the physician, who had avidly participated in the project's programs, based his decision to refer on the client's choice and on his feelings that the necessary care might not be available at the CMHC. He did justify his decision as the mobilization of a community-based support system which had become available through relationships with Spiritist healers.

This case related to another, broader issue—that of the "wounded healer" [17] who cannot seek help for his emotional distress from fellow healers of similar rank and skill out of fear that they will later disqualify him as a healer. As discussed elsewhere [18] traditional healers are commonly also sufferers. This condition assists them to identify the illness and pain in their clients and teach clients by example how to mobilize their inner healers. It follows also that even medical healers are highly vulnerable to contagion of pain and distress, yet cannot express their vulnerability without threatening their images as powerful adversaries of distress.

#### SOME OUTCOMES

Several patterns emerged that reveal some impact of the project on community mental health services and on the Spiritist groups that participated in the project's programs.

The most important change that has occurred in the CMHC system has been the creation of a special referral unit in which referrals by therapists to known Spiritists in the community can be monitored, and referrals by Spiritists to particular units and therapists in the mental health center can continue to include treatment by the referring Spiritist. The director of one CMHC and some of his staff decided that a coordination of mental health and Spiritist interventions might be more effective for certain clients in either system. Such a unit was organized so that mental health workers and Spiritist healers can continually communicate about the client being referred to the alternate system and cooperate in designing the client's treatment program. The pattern for this type

of treatment process was developed in a first experimental case referred to the CMHC by one of the Spiritist participants:

A young woman, 26 years old, twice divorced and with three small children, was hospitalized at the main public psychiatric facility for several months. Her mother stated that, despite having been given extremely high doses of antipsychotic medication (Thorazine® and Haldol®), her daughter failed to progress and seemed more disoriented each time she visited her. Because of fears that other patients were physically hurting her daughter, the patient's mother petitioned for a 15-day home leave; during this time she took her daughter to a Spiritist center. After two sessions, the young woman seemed so much improved that the mother asked the healer whether she should be returned to the psychiatric hospital. The healer suggested that she consult the psychiatrist in charge of her daughter's care and convince him that a transfer to the hospitalization unit at the CMHC (which was close to the patient's family) was a good plan. When informed of Spiritist intervention, however, the psychiatrist disapproved but did make the transfer. This then permitted the coordination considered desirable by the patient's mother. The patient was reassigned to a therapist who participated in the project and was well acquainted with the Spiritist who referred the girl to the CMHC.

Successful coordination took place with the full involvement of the CMHC administration. The patient improved and was discharged from the hospitalization unit, but later failed to return to the day care program. On follow-up, the patient was living successfully with her parents and two of her children and regularly attending the sessions held by the Spiritist.

The specific details of this "coordination case" are too lengthy to be presented here. However, we should mention some areas of disagreement between the two types of therapeutic approach. One important difference arose over the use of antipsychotic medicines. The Spiritist healers felt that "because of the great intoxication caused by the medication, the client's spirit was far from her body", leaving her very vulnerable to harm from *causa* spirits. This prevented the healers from "raising up" the *causas* and taking them from the client—which they saw as a necessary step in their intervention. (This is not an uncommon response of Spiritists, but objection to medication is not always made.) The healers were clearly less concerned over the aggressive actions of the patient and more concerned with accepting her in the state in which she presented. They felt the patient should not be altered in any way in order for them to capture her true state of being and its cause.

A further disagreement arose over the extent of day care that would be beneficial to the patient. The therapist felt that extensive day care would create overdependence in the patient; the healer felt that a month of day care would permit the development of a more empathic relationship with the therapist. This is one example of how differently Spiritists define the major characteristics of the therapeutic relationship as contrasted with the therapists in the CMHC system.

The referral unit was organized and a group of interested Spiritists and therapists met to draw up organi-

zational rules. They agreed to meet at least once a month to review all referred cases. One interesting outcome of the meetings was the Spiritists' attempt to instruct the therapists in the process and attitudes that govern the initial contacts with a client. One suggestion was that therapists should increase their awareness of a client's inner feelings and state, without the need for verbal exchange at the initial session with a client.

An important change has occurred among participating Spiritists: their gradual coalescence into a group, despite the usual divisiveness and competitiveness that characterizes healers of separate centers and distinct beliefs within the Spiritist movement. The Spiritists at least partially affiliated themselves in response to the necessary concretization of their ideas when confronted with ideas and practices in psychology and psychiatry. Analysis of the patterns of interaction, especially during case review discussions, reveals that the Spiritist group gradually resolved differences in interpretation of their treatment practices in the process of forming a united front in response to the probing questions of the therapists. In doing so, some important new ideas have been added to the ideological repertory of some healers, such as "psychological causes (*causas*)" (added to spiritual and material ones) that would indicate the need to refer a client to mental health services. Further, at least seven Spiritists began to involve themselves as interested community persons in the CMHC services and activities. Several Spiritists expressed appreciation of psychological principles as an additional perspective through which to understand their own lives and problems, and, in part, as a way to further augment their own healing skills. At least four healers referred clients (in one case a son) to psychiatric services to find out if the *causa* was "material" or "spiritual" rather than make their own diagnoses.

#### PROVISIONAL CONCLUSIONS

We are just beginning to analyze the vast amount of data compiled on the seminars, the participants and their therapies. On preliminary evaluation the "academic" technique seems to have been effective in countering the problems of integrating two, very distinct, medical systems, especially when the principals of one of the systems have traditionally been denigrated by those of the dominant system and by other societal institutions. The problems of sensitivity of response on the part of the Spiritists, of the danger of co-optation of the Spiritists by the dominant, prestigious medical system, and of the need by health professionals to reject healing methods judged to be "old-fashioned," unscientific, and related to "erroneous" traditions and values, were anticipated in the design of the project's programs. The organization of study groups within the public health institutions made possible a degree of comfort for practitioners from both systems. Moreover, the insistence that we would not propose any particular objectives towards integration of the systems, although leading to some discomfort, left all participants free to decide on the attractiveness of the alternative system. The outcomes reflect their individual and distinctive decisions.

Preliminary analyses of the participants' evalu-

ations suggest that the "therapists" became more aware of their patients' involvement with Spiritism and more willing to consider that involvement as a source of help. Spiritists indicate their better understanding of mental health services and concepts, though seem somewhat less convinced of the help their clients might receive from these services. There is no doubt that movement of each system toward the other has occurred, as discussed in some detail above; the process by which this occurred and the degree of integration remain to be detailed in a subsequent paper.

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#### REFERENCES

1. Brody E. B. *The Lost Ones: Social Forces and Mental Illness in Rio de Janeiro*. International Universities Press, New York, 1973.
2. Ruiz P. and Langrod J. The role of folk healers in community mental health services. *Community Ment. Hlth J.* 12, 392, 1976.
3. Ruiz P. and Langrod J. Psychiatry and folk healing: A dichotomy? *Am. J. Psychiat.* 133, 95, 1976.
4. Scott C. S. Competing health care systems in an inner city area. *Hum. Org.* 34, 108, 1975.
5. Sussex J. and Weidman H. Toward responsiveness in mental health care, and other articles in psychiatry and the social sciences. *Psych. Ann.* 5, 7, 1975.
6. Weidman H. Miami Health Ecology Project Report, Univ. of Miami, 1978.
7. Garrison V. The Inner-City Support Systems Project (ICSS) Project Report, College of Medicine and Dentistry of New Jersey, Jan., 1979.
8. Weidman H. Implications of the Culture Broker Concept for the Delivery of Health Care. Paper presented at the *Annual Meeting of the Southern Anthropological Society*, North Carolina, March 8-11, 1973.
9. Garrison V. The Inner City Support Systems Project: Adaptation of the Miami model of culturally-relevant mental health care. Paper prepared for the *A. Mtg Soc. Appl. Anthropol.*, Philadelphia, PN, March 15-17, 1979.
10. Koss J. D. Religion and science divinely related: A case history of Spiritism in Puerto Rico. *Caribb. Stud.* 16, 22, 1976.
11. Koss J. D. Therapeutic aspects of Puerto Rican cult practices. *Psychiatry* 38, 160, 1975.
12. Koss J. D. Social process, healing and self-defeat among Puerto Rican Spiritists. *Am. Ethnol.* 4, 453, 1977.
13. Harwood A. R. *Spiritist as needed*. Wiley, New York, 1977.
14. Garrison V. Folk healers and community mental health program planning, informal progress report on NIMH Grant, MH 22563-01, May, 1974.
15. Garrison V. Doctor, *espiritista*, or psychiatrist?: Health-seeking behavior in a Puerto Rican neighborhood of New York City. *Med. Anthropol.* 1, 65, 1977.

16. Rogler L. H. and Hollingshead A. B. *Trapped: Families and Schizophrenia*. Wiley, New York, 1965.
17. Groesbeck J. C. The archetypal image of the wounded healer. *J. analyt. Psychol.* **20**, 122, 1975.
18. Koss J. D. Ritual healing and the reduction of psychic stress. Paper presented at the 5th World Congress of Psychosomatic Medicine, Jerusalem, Israel, Sept. 6-14, 1979.

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## MEDICAL PLURALISM ON A GUATEMALAN PLANTATION

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**Abstract**—This paper examines the alternative medical resources and treatments utilized by a population on a Guatemalan coffee and sugar plantation. This is part of a larger multidisciplinary project concerning the assessment of the health and nutritional status of this population. The study revealed a pluralistic complex of multiple and simultaneous usage including home remedies, curanderos, herbalists, midwives, spiritists, shamans, injectionists, pharmacists, private physicians, public and private clinics, and hospitals. These resources include and combine aspects from Mayan Indian, folk Ladino, spiritism and cosmopolitan medical traditions. The pluralistic dimensions of health care are analyzed in terms of the heterogeneous medical behavior of both the health seeker and the practitioners or specialists, emphasizing how components from the various traditions are incorporated or utilized. Case studies are used to illustrate some of the health care strategies used by the population.

### INTRODUCTION

Plantation workers and their families constitute a substantial proportion of the rural population of many Latin American countries. In Guatemala, they comprise approximately 1/3 of the total population. The living conditions on these plantations, known locally as *fincas*, are among the worst for any population group in the country, resulting in high rates of malnutrition, morbidity, and mortality [1]. There has been little research, however, on the health care resources utilized by such populations.

Research by a multidisciplinary team that has been carried out on Finca San Felipe (a pseudonym) at intervals since 1970 [2] has shown that this population has a heavy burden of parasitic and other infectious diseases, anemia, and during the weaning period, protein-calorie malnutrition [3, 4]. During a study of the health care resources and treatments used by this population carried on in 1978, a wide variety of facilities from different medical and religious traditions were found to be utilized by health seekers. These resources include a complex of home remedies, folk curers, herbalists, midwives, spiritists, shamans, injectionists, stores, pharmacies, traveling vendors, public and private clinics, hospitals and physicians and are based on components derived from Mayan Indian, folk Ladino [5], spiritism and cosmopolitan [6] medical traditions.

These diverse traditions have been described for other areas of Guatemala [7–12] and different patterns of interaction and mixed utilization of medical resources have been reported. Woods [10, p.29, 43] interprets the type of interaction of the different medical systems among the Mayan Indians of San Lucas on Lake Atitlan to be one of competition, although modern medicine is often used as a supplement rather than a replacement. Gonzales, on the other hand, suggests that the systems are used for different purposes. "Scientific" medicine is sought for relieving symptoms

and folk curers are sought for relieving the basic cause of the illness, with the same illness often being brought to both types of resources [13, p. 125].

The purpose of this paper is to examine these alternative resources and strategies employed in coping with illness on Finca San Felipe. The pluralistic dimensions of health care will be analyzed in terms of the medical behavior of both the health seeker and the practitioner or specialist, emphasizing how components from the various medical traditions are incorporated or utilized. Case studies will be used to bring into sharper relief the health care strategies used by the population.

### Research setting

Finca San Felipe is a coffee and sugar plantation located in the Pacific coastal lowlands of Guatemala with a population of 690. The adults and older children are wage laborers as well as landless agriculturalists. Men work for cash the year round in sugar and coffee production. The women and older children work seasonally at picking coffee or drying sugar cane bagasse. The entire family participates in the cultivation of corn and beans on small plots of land provided by the finca owner.

The population is of mixed heritage, consisting mainly of second and third generation Indian migrants from different towns in the Western highlands, who brought with them various aspects of their cultural traditions. Approximately two-thirds of the population classify themselves as Indians, the remainder as Ladinos, who originally came from the nearby coastal towns. Most of the Indians are "ladinoized", i.e. speak Spanish and wear Western dress. However, many retain certain Indian cultural traits, reflecting the heterogeneous nature of their community. A few of the middle-aged and older people are bilingual and speak both an Indian language and Spanish, and some women still wear the Indian skirt or *corte*. Several families also practice versions of



Indian engagement and marriage ceremonies, and most still adhere to certain Indian curing traditions.

Housing and sanitary conditions are very poor. The houses are wooden, often contiguous, usually with dirt floors and are one room with adjoining kitchen. Only five of the more privileged families have water pumps and latrines. Most persons obtain drinking water from a central faucet and wash clothes and dishes and bathe in one of the streams running through the finca.

The finca is located 1 hr walk from the town of San Felipe and 12.5 kilometers from the departmental capital of Retalhuleu. These towns offer markets, health centers, pharmacies, physicians and a local hospital. In addition to these resources of cosmopolitan medicine are a variety of folk practitioners and spiritists. The paving of the road from the finca to the Pacific Highway in 1976 has increased the accessibility of these resources. Table 1 lists the resources both on and off the finca that are used most often.

#### Methods

The data and cases used in this study are from a sample of 35 households selected to represent a range of nutrition and health status, as measured in the previous studies. (Indicators of health and nutritional status included height, weight, hematocrits, arm circumference, mortality and morbidity among others.) Beginning with a retrospective 2 week point prevalence study of morbidity and illness behavior these households were revisited every 2 or 3 days for a period of 2 weeks to check on illness episodes, treatment, and household expenditures. Twenty of these households were followed up for a later 2-week period. Some cases were followed continuously for a more extended period of several months. The data we obtained represents minimal usage and costs, since the reporting of some treatments may have been accidentally omitted, yet reveals a complex and costly

resort system. Visits, observations and interviews were conducted with folk curers, spiritists, hospital staff and other resources used by finca clients.

#### MEDICAL RESOURCES

One of the most striking characteristics of health care on the finca is its pluralistic nature. The various resources and practitioners, which are listed in Table 1, represent a combination of different healing traditions. Individual practitioners combine elements from these different traditions in different proportions and styles. In this section, these resources will be described with special emphasis on their pluralistic character.

#### Self treatment

Self or home treatment is usually the first step in medical care, consisting primarily of herbs, often combined with common patent remedies such as Bicarbonate of Soda or Alka Seltzer. Many of the herbs are commonly known. Some grow wild in the bush, some are cultivated in home gardens, and others are bought in the market. Many patent remedies are bought in local stores or obtained at the finca office. Patent medicines, as well as herbs, are assigned a hot, cool, or cold quality and incorporated into the local hot-cold classification system relevant to illness causation and treatment (cf. p. 276). The combination of herbs and patent remedies illustrate pluralism even at the self-treatment level.

#### Folk practitioners and curers

Several types of curers, mostly part-time practitioners, live on the finca. The first type we will call simply a "folk lay curer" or *curandero*, although they are usually referred to by the people as "*un señora*" or "*un señor*". Most are mature women, although there is at least one man. These curers treat primarily chil-

Table 1. Medical resources used by the finca population

#### On the finca

Herbs—bush and patio  
Folk curers (*curanderas*)—4 females, 1 male  
Spiritists—1 female, 3 males  
Shamans—1 female, 1 male (also are spiritists included above)  
Midwife—1 female (and 1 other occasionally used)  
Lay pharmacists, injectionists—Marina, administrator, 2 schoolteachers  
Stores  
Finca office  
Traveling vendors (injectionist, lay pharmacist)—Don Max  
Traveling folk practitioners and quacks

#### Outside the finca

Markets  
Pharmacies  
Public health centers and clinics—San Felipe, Retalhuleu  
National hospital—Retalhuleu  
IGSS—(Guatemalan Social Security Institute)—Retalhuleu  
Private charity clinic and hospital—San Cayetano  
Physicians  
Spiritists—(Most frequently used are 2 spiritists in the *aldea*, Centro Pedro Gomez in San Martin, and Escuela Jorge Gamboa in Quezaltenango)  
Shamans  
Herbalist—Don Rodolfo  
Evangelists  
Traveling folk practitioners and quacks

dren's illnesses, especially the folk illnesses of evil eye (*ojo*) and fallen fontanelle (*mollera caída*), using traditional methods of therapy (e.g. passing an egg or chili and rue over the body for during *ojo*). They are also sought for their knowledge of herbal remedies. One *curandera* also gives enemas followed by herbal teas. Another is a more general curer who occasionally acts as a midwife. Two other people, one man and one woman, specialize in treating sprains (but deny curing broken bones) through a combination of pulling and setting bones, massaging, applying patent remedies like Balsam and herbs. These curers are usually paid 25¢ and supplied with treatment materials.

Spiritists represent another type of specialist utilized frequently by the finca population. Spiritism is a separate system, neither Indian nor cosmopolitan, but is derived from a European tradition which spread throughout Latin America [14, 15]. These spiritists follow the teachings of Alan Kardec and consider spiritism as the "science of the interrelationship between the material world and the *espiritus* (spirits)... of the invisible world" [14, p. 80]. Although we are concerned here with their role in illness therapy, spiritists are resorted to for a variety of personal and family problems of which illnesses are but one kind.

Two spiritists who live and practice in the rural area adjacent to the finca and within walking distance ( $\frac{1}{2}$ –1 hr walk) are the ones most frequently used by the finca population. One is female and the other is male. Both are Ladino, although many of their clients are Indian. Several people go regularly to the *centros*, as their establishments are called, once a week or every few weeks to ask for protection, to give thanks, or consult about various problems. Others go only if seriously ill. Pregnant women go to insure a safe delivery, mothers seek cures for their young children, adults seek help for chronic or severe illness. People also go for protection against evil influences which may be the cause of both current and future health problems.

Both spiritists hold public meetings twice a week, with worship services as well as healing sessions. The spiritist supposedly goes into trance and acts as a medium, becoming possessed by a spirit who says prayers, or gives sermons or exhortations, depending whether it is a "good" or an "evil" spirit. A "good" spirit also holds consultations with the clients, most of whom are female, diagnoses and prescribes treatments. These are written down by a secretary. The male spiritist uses a tape recorder to record his sessions. Private consultations, as well as these public sessions, may be held at this time or on separate days. Prescriptions are usually a combination of herbal remedies and pharmaceuticals, including antibiotic and vitamin injections, pills and tonics. The spirit may promise to visit the home of the client at night to heal him and/or exorcise evil spirits. The spiritists lay on hands and sprinkle or rub special perfumed water or oils (e.g. *agua florida* or *agua violeta*) on the client to get rid of evil influences and to transmit healing force from the spirit to the client. They are given voluntary donations, usually 25¢, rather than a set fee. The female spiritist is also currently training some new spiritists, whereas the male is not.

One of these new spiritists becomes possessed by a spiritual doctor, Dr. Jorge Gamboa, who does invisible operations and invisible X-rays. This spirit, who is supposedly of Mexican origin, appears at several *centros*, which seem to be related to a large *centro* in the city of Quezaltenango, called "*Escuela Heliosophica, Juan el Bautista, Hospital de Operaciones Invisibles Centroamerica, Dr Jorge Gamboa*", which was established in 1962. Despite the distance (over 50 km), the fare (\$1 each way), the consultation fee (\$4) and the operation fee if necessary (\$4), and the time lost (about 1 hr walk, 1 hr bus ride and several hours waiting at the *centro*), several people from the finca utilize this resource. In addition, one visit usually entails at least one subsequent consultation, thus increasing the cost. (Cf. Case C who went at least 4 times to this spiritist.) This spiritist emphasized that the treatment and invisible operations do not work if one does not have faith. Without faith, it could be dangerous. By means of invisible operations, he claims to have cured tumors, gallstones, kidney stones, cataracts, headaches, and other assorted pains. On one day he had at least 25 consultations and performed 6 operations, which one of the authors observed. Like the other spiritists, he prescribes a combination of herbs and patent remedies and has a secretary write out the prescriptions. He also sells some of the common remedies. In addition to integrating cosmopolitan medicines and techniques into his practices, he has "joined forces" and works together every Sunday with a physician or "material" doctor from Guatemala City who is a specialist in gynecology and obstetrics. Thus he sees cosmopolitan medicine and spiritism as complementary, not competing, one treating the "material" and one the "spiritual" side of a client's illness.

Some patients from the finca were referred to this *centro* by another one, *Centro Pedro Gomez*, near the town of San Felipe. This *centro* is visited by the spirit of *Hermano Pedro*. The practitioner at this *centro* also seems to be a *zajorin* or shaman because he does ritual "burning" and sacrifices. He trained the midwife on the finca to become a shaman but also referred her, as well as others (Case C), to the *centro* in Quezaltenango for an invisible operation. There is a mutual referral service and division of labor between these two *centros* and their specialists. For certain problems, such as witchcraft, rituals of burning incense, candles, rum and other materials are necessary and performed by *Hermano Pedro*. If he feels the client needs an invisible operation for his illness, however, he refers him to the *centro* in Quezaltenango, and *vice-versa*, illustrating the pluralistic usage by both the health seeker and the health provider. The midwife, who has been treated in both *centros* by such mutual referrals, said both the spirits of *Hermano Pedro* and Dr Jorge Gamboa, as well as the "invisible midwives" help her. However, if she feels that she cannot cure a client because of the seriousness of the problem, she refers them to these other *centros*. She also refers relatives and neighbors who are not clients but seek her advice informally. In addition, the spiritist may suggest that the client go to a local physician or on the contrary, may intimate that the physician's advice or a local hospital's treatment is inadequate or even harmful in the patient's present condition. The role of the spiritists in the lay referral system and the

relationships among the *centros* and the different specialists are areas that have been investigated and deserve further research.

These spiritists have incorporated aspects of cosmopolitan medicine into their practice and expanded their repertoire with pharmaceutical remedies, techniques and symbols, such as written prescriptions, operations and X-rays, and spirits of dead doctors. In certain respects, they are using the doctor as a role model, but projecting these aspects into the spiritual realm. Their use of the spirits of dead doctors and modern medicines are also a way of validating their own status as healers. On the other hand, many of the concepts and practices of spiritism reinforce folk Indian and Ladino traditions. These similarities derive from a holistic framework which includes: (1) belief in the ability of spirits to influence the living, (2) the inseparability of mind and body, (3) mutual influences of emotions and interpersonal relations on the body, (4) the etiological factors of envy and witchcraft, and (5) treatments of herbal teas and baths.

Another type of medico-religious specialist and healer combines certain Indian traditions with those of Ladino spiritists, as well as incorporating knowledge of pharmaceutical remedies. People use the term *mesa* (altar) or *quemadero* when referring to these specialists. At present, two men on the finca are this type of practitioner. Both have begun to practice recently, one in 1975 and the other in 1977. There was another practitioner but he died in 1978. The former is also a shaman (*zajorin*) who uses divining seeds and the Mayan ritual calendar. These specialists work mainly in evening group sessions on Mondays and Fridays, although they also conduct private consultations. Candles are burned in front of the altar, prayers recited, and each client receives a benediction in front of the altar. When the candles burn out or are blown out and the room is dark, the spirit or spirits enter the room and talk with the clients, each of whom consults with the spirit. During this session the healer does not go into trance and the spirits do not possess his body; rather he has a dialogue and talks with the spirit. The spirit diagnoses and gives a prognosis of the illness or problem. He often attributes the etiology to spiritual or personalistic causes, such as witchcraft or evil influences. He also prescribes treatment, usually a combination of herbs and pharmaceutical remedies. The spirit may require additional ceremonies, usually referred to as "*trabajos*" (works) or "*se quema*" (burnings). These are private ceremonies which involve the burning of candles and incense, and offerings of sugar, rum and tobacco, and cost from \$2-10.

An herbalist, Don Rodolfo, is another type of specialist used by the finca population. He lives in a town about 15 km away, where he has a "botanical center" (*Centro Botanico*). On this *centro* is a sign stating he does not deal with spiritism or witchcraft. Much of his paraphernalia, however, is similar to the spiritists and other healers. He has a large altar with candles, pictures of saints, crucifixes, a crystal ball of water and oil lamps. Although most of his clients are concerned with illness, he also deals with problems of business, family, and obtaining protection from evil. He explained to us that most of his herbal remedies

are based on the hot-cold theory using the principle of opposition, although he considers his knowledge of herbs to be a divine power and gift from God. He claims to have cured over 400 cases of paralysis, or what he called polio, with herbal remedies and exercise, as well as other illnesses that physicians could not cure. Much of his practice can be considered naturalistic medicine in a supernatural idiom. Incorporation of modern symbols and techniques is reflected by his secretary who types out the prescriptions of herbal remedies to give to his clients. On consultation days (Mondays and Fridays), 80 or more people from all over the country wait in his yard for consultations. During the long wait much socializing takes place, in contrast to the impersonality of clinic waiting rooms. He holds brief consultations involving little or no physical contact or examination. Rather, he questions the client and ascertains the cause, diagnosis and treatment, which he says he does by concentrating or meditating with the help of a crystal ball of water. He does not charge a fee but people give donations of whatever they want or can afford, usually 25¢, and one votive candle (*veladora*) costing 15¢.

The most active specialist on the finca and the one combining the most medical roles is the midwife or *comadrona*, Maria. She attends almost all of the deliveries on the finca and many in neighboring areas. She is a traditional or empirical midwife, but after practicing for several years, she took a 6 months training course offered by the Ministry of Public Health in 1960 and received her official license. She still attends review classes which are held periodically and has incorporated or combined various aspects of modern medicine that she has learned with traditional practices. For example, she cauterizes the umbilical cord with a candle flame, a traditional practice, and then applies alcohol, mertiolate, and talcum powder, as she was taught in the course [16]. Maria is also a *curandera*, especially for illnesses of infants and children, such as the evil eye, and of women, such as delayed menstruation and fallen uterus, and prescribes herbal remedies for her patients. She also occasionally acts as a spiritist but says she rarely practices now because of the drain on her energy and possible conflict if she is called for a birth. If she is tired from attending a birth and then goes into trance, she is more susceptible to evil forces and spirits since her resistance is low. She does, however, burn candles and pray for the spiritual protection of her clients.

In addition, she has recently become a shaman (*zajorin*) in the Mayan Indian tradition, even though she identifies herself as a Ladino (non-Indian). The shamanic role is characterized by divine recruitment and validation, apprenticeship with another shaman from whom one receives his special bag of divining seeds, and the power to divine and interpret the seed which are laid out and counted according to the Mayan ritual calendar, Mayan prayers especially to the spirit or essence of the Earth, *El Mundo*, and the spirits of the hills and volcanoes, and performing rituals that involve offerings of incense, copal, candles, rum, chocolate, and chicken sacrifices. Maria was recruited for this role through the process of being cured of a serious illness by a shaman, who told her she must become a shaman or else she will be continuously sick. Maria did not know any Mayan language



previously. She apprenticed with this shaman for 9 months, during which time she learned the Quiché-Maya prayers, ritual calendar and interpretation of the divining seeds.

Maria's practice epitomizes the pluralistic system, incorporating elements from several traditions, even to the extent of becoming increasingly Indianized. However, she does not integrate the spiritist and shamanic systems of practice but rather compartmentalizes them and practices them separately. She has a separate altar for each and employs them at different times for different clients. Maria is a highly influential and respected person in the community. Her intelligence and resourcefulness are manifested in this expansion and utilization of different kinds of knowledge.

All these folk healers and specialists have been recruited through the traditional means of having suffered and been cured of a serious illness and/or having had unusual disturbing dreams or visions which were interpreted by another specialist as signs and messages from God of their divine calling, which they must fulfill or else suffer dire consequences of further illness or death. Those mentioned above are the ones most frequently utilized by the people on the finca. There are other specialists in different locations, such as the town of Mazatenango, which the people use less frequently but may resort to in time of need and desperation.

Occasionally, traveling curers, quacks and frauds are used who practice outside of these medical systems that articulate with the community. One such man claimed to be a diviner (*sabio*) and was traveling to the different fincas and villages "looking for sick people"; another was an astrologer (*astrologo*) located temporarily in a nearby town (cf. Case B). They usually attribute illness to witchcraft or some other form of evil and they suggest treatment that requires expensive rituals. These practitioners exert pressure by getting the patient upset and afraid, threatening him with the supposed consequences of not performing the rituals. Essentially they then "take the money and run". They play on peoples' desperation, anxieties and fears about illness, employing beliefs and practices derived from the traditional or folk medical systems. Their mobility ensures them of a type of protection because they are not subject to community social or legal pressures. The existing pluralistic system with a wide range of options also makes it easier for them to practice.

One woman claims to have been cured by Evangelicals after having tried all the types of available medical resources, and consequently converted. The Evangelicals are from outside the finca, whereas the finca population is Catholic. This case occurred just at the end of our fieldwork and it will be interesting to see if the Evangelical faith healing spreads due to the reputed success of this particular case.

#### Lay pharmacists

There are two health practitioners who focus to a greater extent on cosmopolitan medicine and play major roles in providing health care on the finca.

The first of these, Marina, runs a store on the finca in which she stocks a wide variety of common patent

remedies, antibiotics and vitamins and is widely sought for advice on illness and treatment. As a local health care resource, Marina is easily accessible, familiar with the people, and gives credit. She plays the role of local lay pharmacist and injectionist, suggesting medicines to her clients and giving injections when she deems appropriate. She also gives injections prescribed by physicians or spiritists and those bought at the pharmacies by her clients, at a cost of 20¢/injection. She learned to give injections a few years ago from some nurses who gave a brief course. At other times she recommends herbal remedies, of which she has a wide knowledge. She plays an important role as liaison or broker between the finca people and cosmopolitan medical resources and practitioners. If she cannot diagnose an illness or is not sure of the treatment, she will go to a town pharmacist for advice. The pharmacist is one of her main sources of knowledge and serves as her role model. When she feels an illness is severe, or her remedies are not successful, she often refers patients to doctors or clinics in town. She urges patients with pulmonary problems to get chest X-rays for T.B. at the Government Health Center. On the other hand, she is a loyal follower of one of the spiritists in the *aldea* and regularly refers patients to her. In addition, her daughter is training with this spiritist to become one herself. Marina has expressed her desire to learn and receive more training in cosmopolitan medicine but with only 3 years of schooling, although she can read and write, such training is unavailable to her.

The second important lay pharmacist and injectionist is Don Max, a traveling vendor of patent medicines, injections, and *suero* (intravenous serum or saline). He acquired this knowledge when working in a hospital, and has now had 20 years experience in providing health care. He lives in the town of San Felipe, but makes daily rounds of the nearby fincas on his motorcycle. He advises and prescribes treatment, especially injections. Also, if an individual has bought injections from the pharmacy, he can pay Don Max to inject them. He charges 25¢ to give an injection and \$5 for *suero*. He permits people to buy on credit and increases the price accordingly. Thus a bottle of *Vitalfuerte* (a vitamin tonic) which is marked \$3, he may sell for as much as \$4.50 or \$5. His opinions and treatments are widely sought and highly regarded by a majority of the finca population. He is charismatic, smooth and confident, in turn instilling people's confidence in him. Although he practices a type of cosmopolitan medicine, which can be called "commercial pharmaceutical medicine" [6, p. 271], he does not denigrate or condemn the folk beliefs and practices. For example, in one case he was called in to see a baby who had diarrhea and gave the baby an injection. When the grandmother said something about the baby possibly having *ojo* he replied "of course you cure for *ojo* first and if that doesn't work, I'll give the injections."

There are a few other people on the finca who administer minor treatments and give injections. One of the school teachers gives injections, enemas, and also suggests herbal remedies; the other schoolteacher occasionally gives injections. The finca office personnel treat minor wounds and illnesses and also give some injections. A small supply of basic patent medi-



cines are kept in the office and given free when needed.

No official or cosmopolitan health care program exists at present on the finca. For 2 years (1972-1974) a doctor held a monthly clinic, also providing family planning, but he no longer comes. The Ministry of Health has occasional vaccination programs. Due to an epidemic of whooping cough and measles in 1978, a team came from the town clinic to administer vaccines on the finca.

#### *Cosmopolitan medical resources*

The major resource of Western or cosmopolitan medicine is the pharmacy, of which there are several in the towns of Retalhuleu and San Felipe. Although the pharmacy is the initial resort in many cases, it is also the end of the pathway for almost all other resources, since most practitioners of both alternative and cosmopolitan medicine give prescriptions for patent medicines which are usually filled at a pharmacy. Pharmacists prescribe drugs and give injections on their own, according to the symptoms described by the clients. The pharmacist thus acts as a lay doctor, diagnosing and recommending prescriptions, as well as filling them. Some pharmacists also have some knowledge of folk medicine and sell various oils and concoctions such as *Agua Florida* and *Esencia Maravillosa*. They can serve as cultural brokers articulat-

ing the different systems, although representing predominantly one component of the cosmopolitan medical system.

Government facilities are also available, the main ones being a Public Health Center in San Felipe and one in Retalhuleu. San Felipe is more popular, partly because it is about an hours walk from the finca so people do not have to spend bus fare. Consultations are held only on certain days and hours and cost 25¢. Patients have to arrive early in order to receive a number, after which they may have to wait for several hours. Occasionally free medicines are provided but more often only prescriptions are given and the medicines must be purchased at the pharmacy. Services are also available at the government national hospital in Retalhuleu, which has an outpatient clinic, emergency services and regular inpatient services. Although the hospital theoretically is free, the finca people feel that they will be given attention only if they are referred by a private physician. Even in emergency cases, a private doctor is preferred first. Thus the patient must pay the fee of the referring doctor, which is usually \$4. In addition, a stay in the hospital might entail other costs, such as serum, blood, ice and other medicines prescribed by the physician. As shown in Table 2, Case A, one family paid \$65.50 for such items for an 8 day stay in the hospital of their 1½-year-old girl, plus \$19.40 for the parents' fare and food for the week. The

Table 2. Case A—Sylvia

Date	Symptom	Resources	Cost (\$)
April 18-May 1	Diarrhea	Home remedies, herbs	
May 1	Diarrhea	Store—Marina terramiacin pills	0.24
		Curer 1—evil eye	0.50
May 16	Diarrhea, fever, vomitting, apathy, listlessness, conjunctivitis	Spiritist 1—injections, suppositories	2.75
May 17	Same	Curer 1—enema (prescribed by spiritist)	0.25
May 18 morning	Same	Clinic—San Cayetano Flagyl	0.25 7.80
May 18 evening	Same	M.D.1 → Hospital	55.00
		M.D.2 (in hospital)	10.50
May 27	O.K.	Returned from hospital Fare and food costs for the 8 days	19.40
May 30	Diarrhea, fever	Spiritist 1	?
June 1	Same	Curer 2—evil eye	0.25
June 2	Same	Schoolteacher—enema M.D.3—suero, tonic, injections	0.40 17.85
June 3	Same	Injectionist—Don Maz	0.25
June 5	Same, head falling to side	Spiritist 1—says polio, prescribes injections	0.25 4.60
June 6	Same	Injectionist—Don Max	2.94
June 8	Same, but head better	Spiritist (shaman) 2— ceremony and supplies, refers to M.D.	13.50
June 9	Same	M.D.3—tonic, injections	20.05
		Injectionist 2—Marina	5.00
June 16	Same	Herbalist—Don Rodolfo	5.00
Total			166.78

lack of care and impersonality felt by the patient is also partly a reflection of the lack of sufficient staff for the hospital, as well as of the condescending attitude of some of the personnel. Another government service is the Guatemalan Institute of Social Security Hospital (IGSS), also in Retalhuleu. This is free but only treats workers' accidents that are referred from the finca office.

There is also a private charity clinic and hospital near San Felipe, the Hospital Hilario Galindo, popularly called San Cayetano, which is run by Catholic sisters. Consultation costs 25¢. The clinic is held every morning, whereas the public health clinic is held only on certain days (other days being for prenatal clinic and well-baby clinic). Usually a physician and student doctors are present, whereas there is often no doctor at the San Felipe health center, a factor influencing people's choice of clinic.

There are several private physicians in Retalhuleu and other nearby towns that are used by the finca population, primarily for illnesses that they perceive as very serious. One doctor is a specialist in children's illnesses and has his own private clinic. The present doctor's average fee is \$4 (approximately 4 days wages of a finca worker). Sometimes free samples of medicines are provided, but usually medicines are prescribed and must be bought at the pharmacy.

The description of the various types of medical resources presented above indicates the range of medical treatment available to and utilized by the local population and represents a variety of combinations of folk and cosmopolitan medical traditions. The decisions concerning these treatment options are based on multiple factors and considerations including: cost (fees, medicines, transportation, wages lost, etc.), distance, time, accessibility, economic resources, household composition, and social context. These factors and decision making strategies will be analyzed in a future paper. However, to illustrate the pluralistic illness behavior and some of the types of strategies used in coping with illness, we will present the following three case studies. Although economic factors are important, other sociocultural variables may be crucial constraints or facilitators. The selected cases have differential access to and availability of economic resources. They also represent different illness situations. Case A, Sylvia is a 1½-year-old female with a serious illness, whose family has access to various economic resources; Case B, Juan, is a 1½-year-old male who has been chronically ill and suffering from an acute serious episode, and whose family has few resources; and Case C, Vicente, an adult with a chronic illness. (Pseudonyms are used for clients' real names.)

#### Case A: Sylvia (Table 2)

Sylvia is the youngest of four children and lives in an extended household. Her father earns an average of \$32 monthly. Her family, especially her grandmother, however, has resources of land and animals outside the finca, including cows, which assure the family of sufficient corn year round and milk when needed. Our study of Sylvia began May 1, when she was 1 year, 5 months old. She had been having recurring bouts of diarrhea at least since April 18, and was treated mainly with various herbal teas and home

remedies. As can be seen from Table 2, on May 16 she became worse, not only with diarrhea but with fever, vomiting and apathy. Her family became more alarmed and she was taken to a female spiritist near the finca.

From this point on, treatment and costs accelerated and escalated. In a period of 6 weeks, Sylvia was taken three times to folk curers on the finca for evil eye and fallen fontanelle cures, 6 times to 3 practitioners for injections, enemas, and other patent remedies, 4 times to 2 different spiritists, 1 of the finca and 1 on (who is also a shaman), 1 herbalist, 1 charity clinic (Hilario Galindo), 3 different private physicians, and the national hospital in Retalhuleu. Almost every trip to a spiritist or a physician also entailed a trip to the pharmacy to fill the prescriptions. This meant at least 5 trips for Sylvia's medicines. In addition to herbal teas, baths and enemas, Sylvia received a minimum of 28 injections (including antibiotics, vitamins, and calcium), terramycin pills, Nanciol suppositories, Flagyl, alcámfor, pomades, Vicks, vitamin tonics, Donnagel, and seven liters of *suero* (saline solution or serum).

During this period, Sylvia appeared to be suffering from a combination of malnutrition and enteric infection. (According to height and weight measurements taken after recovery, she had 2nd degree malnutrition. Although we do not know her weight while she was sick, presumably it was lower and her malnutrition worse.) Due to beliefs, both on the part of the family and of the doctor, solid foods were withdrawn. When we visited Sylvia in the hospital, the referring physician told us and the parents that the baby had a *Shigella* infection and this must be cured before giving the infant food. She was given intravenous feeding of water and glucose to prevent dehydration. After 8 days in the hospital she was released, and then given vitamin injections. Although the family had cows and chickens, milk and eggs and other food were withheld on the belief they would be harmful to her while she had the diarrhea and fever.

By the time of Sylvia's recovery, the total estimated expenditure was over \$166. To cover these costs, her father borrowed from relatives (mother and brother) and from the finca, and in August, he still owed money to two practitioners. He also worked in the evening as a night watchman on the finca to earn extra money to pay back the finca owner and other debts.

#### Case B: Juan

Juan was 1½-years-old at the time of the study and the oldest of two children of a young couple. They also live in an extended family but one with few resources. Juan's father earns an average of \$32 a month but from this he must buy their staple corn during this lean season. Juan has been sick almost from birth. At 2 months, he was taken to a spiritist for protection and treatments. The spiritist prescribed patent medicines, herbal teas, vitamin B12 and calcium injections. He had repeated cures for the evil eye and fallen fontanelle, several purgatives and enemas. At 1-year-old, he had had scarlet fever from which he recovered but has since had chronic diarrhea. In addition to the malnutrition and diarrhea syndrome that Juan seemed to be suffering from at the time of our

study, he was believed to be deaf and dumb. In April and May, because of severe diarrhea and increasing listlessness, he was taken 4 times to 2 different physicians, including one overnight visit in a private clinic, which together with the prescribed medicines cost \$53.50. These visits were interspersed with frequent treatments by curanderas and a spiritist.

In August, a travelling curer-diviner came to the finca. When he saw Julio, he told the mother that the child will die when he reaches 2 years old, because her husband's previous girlfriend did evil on her when she was pregnant with Juan. The evil fell on Juan and that's why he is mute. For \$7 he would do a "*trabajo*" (ritual) so that Juan would not die. The mother borrowed the money from her mother for the ritual. She also went to an *astrologo* (astrologer) who was visiting in another town. He charged \$5, which she borrowed from her father, and gave her a piece of paper and told her to come back in 9 days, when he would give her a *secreto*. She went back and no one was there. These last two types of traveling curers seem to be frauds and con-men who prey on people's anxieties about illness and their beliefs in envy and evil.

This young couple sold their two pigs, pawned their radio and watch, borrowed from relatives, and were still in debt at the end of our study, owing at least \$54 to several sources, including a nearby finca, which they will have to work off. At the height of the coffee season in October, the mother was working this debt off at the neighboring finca and for several weeks all her wages went to repay the debt. The family was

reduced periodically to eating just tortillas and greens, without any beans or meat. The impact of medical spending, especially on food and consumption of the household was much greater in this case than in the first case of Sylvia, whose family has more economic resources.

#### Case C: Vicente (Table 3)

Vicente is a 45-year-old head of household with a wife and 5 children. He also earns an average of \$32 monthly. In January, 1977, he fell off the cane truck and had a pain in his chest, "*como aire*" (like air) and has had problems since, including not being able to work regularly. At that time he went to the Guatemalan Social Security Institute, where they took X-rays and gave him some pills. Between January 1978 and April 1978, he had recurrent sore throats, chest and stomach pains, for which he drank herbal teas that were considered "*fresco*" (cool) because his body was in a hot state from working in the sun. During April, he also went to the San Cayetano clinic since the symptoms continued. In May, he became worse with diarrhea, stomach and chest pains and wheezing. He took some more herbal remedies and a few terramycin pills. He consulted a spiritist, who prescribed compresses and plasters, herbs and patent remedies of various kinds, in accordance with the hot-cold principle of opposition, and referred him to another spiritist centro where invisible operations are performed. Vicente and his wife went to this spiritist in Quezaltenango at least 4 times during May and

Table 3. Case C—Vicente

Date		Resource	Cost (\$)
Jan. 1977	Fell off truck— chest pains	IGSS—pills, X-rays no relief	—
Jan. 1978— Apr. 1978	Sore throat, chest pains	Home remedies—herbs	—
Mar. 23	Same	Spiritist 1—herbs, patent remedies	3.30 4.15
Apr. 14	Cut finger at work	IGSS	—
Apr. 17	Sore throat.	Clinic—San Cayetano	0.25
Apr. 29	Stomach-ache	M.D.	5.00
Apr. 30	Feeling better—study begins		
May 2	Stomach-ache, diarrhea, "colico"	Herbs, Store— terramycin pills	0.12
May 3	Same	Store—Marina	0.16
May 4	Stomach-ache, <i>aire</i> (air in chest), sore throat, wheezing	Spiritist 1—herbs, patent remedies	2.74
May 5	Same	Continuing treatment	
May 7	Same	Same, purgative	0.15
May 8	Same	Same, herbal mouthwash	0.05
May 9	Same	Spiritist 2 (referred by Spiritist 1)	8.42
May 18	Fell off cane truck	Home remedies	0.10
May 20	Worse, couldn't sleep	IGSS—pills, injections	
May 23	Same	Spiritist 2—invisible operation	10.00
June 6	Better but still hurt a little	Spiritist 2—checkup (fee and fare)	6.00
June 20	Better	Spiritist 2	6.00
July 25	Very weak	Spiritist 2	6.00
Aug. 6	Same	Pharmacy—medicine prescribed by Spiritist	2.70
Total			55.14

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June (every 2 weeks). During one of these visits he had an invisible operation. Despite the expenses and loss of a days wages each time he went, he expressed great faith in this spiritist and his treatments.

#### DISCUSSION

These case studies illustrate certain similar patterns of illness behavior, although the families differ in their economic resources. Case A had greater resources and thus the number and frequency of resources utilized may have been more than the average, but the pluralistic strategies and behavior were similar. The multiple usage is the most striking characteristic of people's health care strategies. People do not perceive a conflict among these alternatives, nor do they seem to perceive them as different systems, but rather as a variety of options, some more accessible than others, some cheaper than others, among which they can choose.

Most usage is sequential, but some is simultaneous. For example, in Case A, Sylvia's mother went to the spiritist to ask for protection and assistance in curing Sylvia, who was at that time in the hospital. An infant who is being given medicines prescribed by a physician or clinic for diarrhea, may also be taken concurrently to a local curer for the evil eye. Although certain folk illnesses, such as evil eye and fallen fontanelle, are thought to be cured only by folk curers, this does not preclude the use of modern medicine to treat the symptoms. In other cases, the symptoms are treated with modern medicine, while the cause of the illness is dealt with through a folk specialist (Gonzales [13] reports similar findings). In addition, traditional or folk theories of illness etiology are often multifactorial and multilevel (e.g. immediate and ultimate levels of causation), which permits the use of different treatment resources for the different causal factors and levels [17, 18].

A clear sequence or hierarchy of resort does not seem to exist, although the trend is to begin with low cost or home remedies and move to more expensive resources as the course of the illness proceeds and becomes more serious. However, there is also a back and forth movement between resources, or a shot-gun approach, often based on referrals and advice from relatives and neighbors and other practitioners, which seems to be associated with desperation over the perceived increasing severity of an illness.

This pluralistic behavior is pragmatic, often based on trial and error, perceived effectiveness, uncertainty of illness causation, and expectation of quick results. For example, if a child has diarrhea, it could be evil eye, so the child is taken to a folk curer. If the baby still has diarrhea, then maybe the cause was not the evil eye but some other factor, so he is taken to another resource. This process of multiple therapies continues until the patient is cured or feels relief.

In addition to this empirical and pragmatic behavior, however, is the role played by faith in the supernatural or spiritual in curing. All three cases went to spiritists or other religious-medical specialists and expressed their faith in the important role they played in the cure of their respective illnesses.

Pluralistic medicine is manifested not only in the coexistence of several traditions, each with their own

specialists, ideology and practices, which are used by the client population, but also in the integration of elements from each of these traditions by the practitioners (except for the physician). Almost all the folk practitioners and specialists use pharmaceutical medicines in their treatments—injections of antibiotics and vitamins, medicated plasters, pomades, purgatives, tonics, as well as herbal remedies. They are eclectic and adopt whatever is useful and available to them from various systems, but increasingly from cosmopolitan medicine [6, p. 6]. They use both "material" medicine and spiritual means to cure illness. Writing prescriptions, invisible X-rays, invisible operations, spirits of deceased doctors are some of the other aspects of cosmopolitan medicine they have incorporated. They are thus using certain aspects of the physician's role as their model, and thus acknowledging and reinforcing his prestige. However, it is primarily the technology and pharmaceuticals that they have adopted, reflecting both their own and their clients' faith in those aspects of Western medicine. At the same time, this role adaptation increases the practitioner's chances of successful practice [19].

Although the overwhelming direction of influence is that of cosmopolitan medicine, there are also some Indian influences. The most striking example of Indianization is the Ladina midwife who recently became an Indian-style shaman, using the Mayan calendar and divining seeds. Another man started practicing a combination of spiritism and shamanism about 3 years ago. He and some of his clients, including one Ladina woman, refer to the spirits who visit him as *naguales*, which is an Indian concept of a companion spirit that traditionally was an animal [20]. Although the trend reported in some places in Guatemala and Mexico is one of decline and lack of replacement of the shamans (although an increase in spiritism) [21], on the finca there is a perpetuation, if not an increase, in this type of specialist.

Another Indian influence is the figure of San Simon. The cult of San Simon is usually regarded in Guatemala as an Indian cult, which has become widespread and increasingly popular. Part of its original popularity derived from a syncretism of the saint with the old Mayan god, Mam, and in Santiago Atitlan became Maximon [22]. One of the folk curers and the midwife had statues of San Simon on their altars to whom they prayed, and his spirit now appears to some of the Ladino spiritists.

Diverse elements are incorporated by practitioners and clients not only with respect to therapeutic techniques and remedies, but also in terms of concepts and disease categories. People believe that vitamins, as well as calcium and iron are substances that help cure by giving one strength. This is in accordance with the folk belief that strong blood will give one resistance against illness and evil influences and conversely, weak blood increases one's susceptibility to illness. Vitamins, iron, calcium, and liver extract have been integrated into the folk belief system as inherent strength-givers through this strong-weak principle. They are taken in the form of medicines, usually injections and tonics. Vitamin injections are especially valued as it is felt they are more effective and work faster than pills and are thought to provide strength needed for the patient to recover. Vitamins are not



conceived of as an important ingredient of food. The emphasis on vitamin and calcium injections and tonics is supported by the actions of physicians, pharmacists and folk practitioners, who increasingly prescribe them. The concept of vitamins is accepted but incompletely understood or misunderstood.

Patent remedies, including vitamins, minerals, and antibiotics, have also been classified into hot, cold, and fresh categories, in accordance with the folk hot-cold principle of opposition, depending on the disease for which they are used and their bodily effects. For example, penicillin is hot because it is used for pneumonia, a cold illness; aspirin is hot because it makes one sweat; Alka Seltzer is cool because it is used for inflammation, a hot disease [23].

Disease categories and terms from cosmopolitan medicine are increasingly used but not necessarily understood. One such category is "infection" (*infeccion*). In Case A, the doctor told Sylvia's parents that she had an infection, but without any explanation of what that meant or any reference to parasites or microbes (terms which some informants used and described as little animals "*animalitos*"). Some people thought infection referred to something blocking the stomach, a parallel to the folk illness of *empacho*. One confused informant said that one doctor said her baby had bad parasites and another said he had an infection. She had no idea that these might refer to the same thing.

The pluralistic medical situation on the finca provides flexibility and fills different needs of the population. The folk systems are open ones, as manifested by the eclecticism of both the clients and practitioners, who adopt and adapt aspects from the array of coexisting medical traditions. Whether the practitioner is on the traditional side of a traditional-modern continuum, like the midwife Maria, or on the more modern end, like the injectionist and lay pharmacist Marina, he is eager to gain new skills and knowledge, broaden his scope of medical enterprise and adapt his role to the changing situation and the needs of their clients. This openness of folk systems, as Press points out [24, p. 81] is manifested by the acceptance of inputs from other alternative health systems, including cosmopolitan medicine, and also inputs from other institutional sectors, such as religion and the family. According to Landy [19] the traditional healer role stands at the interstices of religion, magic, and the social system and gains its power from this position. This contrasts sharply with the closedness of cosmopolitan medicine, which is "discontinuous from ordinary social processes" [24, p. 71; 25, p. 290] and is unaccommodating to alternative systems.

#### CONCLUSION

One of the characteristics of the pluralistic medical system as presently practiced by the finca population and the various practitioners is the increasing prevalence of "technologized" medicine or what has been referred to as "pharmaceutical medicine". The choice of cosmopolitan medicines, especially antibiotic and vitamin injections, frequently results in inappropriate use with consequent ineffective treatment. One type of inappropriate usage is the underuse of medicines, es-

pecially antibiotics, characterized by short term treatment and small quantities. This is promoted by several factors: (1) practitioners sometimes prescribe short term treatments, (2) the economic constraints mean people can often only afford to buy a small quantity at one time, and (3) people expect unrealistically quick results. The observed rapid effects of antibiotic injections have now been generalized to other patent remedies.

The expectation of quick results also leads to multiple usage. If one does not obtain rapid relief, he changes physicians or curers. The patient does not tell the healer what medication or treatment he has been taking or even that he went elsewhere previously. Without this knowledge, it is more difficult for the physician to prescribe effective treatment. In addition, the patient does not stay long enough with the physician or other practitioner to be cured. Since the patient will change practitioners if dissatisfied, they cannot follow the outcome or know the effectiveness of the treatment. Similar situations have been reported elsewhere [26, p. 108; 27, p. 314]. Multiple usage also results from using up credit and/or cash, so the patient switches to someone with whom he does not have a debt [28]. Possible drug interactions may be another problem resulting from this switching.

There is overuse and abuse of antibiotics and injections of all kinds, given and prescribed freely by almost all practitioners, folk and cosmopolitan. This overuse exists throughout Guatemala, where it has been reported that in 1976, Guatemalans spent \$40 million in buying medicines (this does not include institutional or physician's sales) [29, p. 79]. One of the obvious dangers of this overuse is the potential buildup of antibiotic resistance.

Misuse of pharmaceuticals is especially evident in the prevalence of vitamin and calcium injections. Their popularity partly stems from a misunderstanding of the concept of vitamins. The need for clarification in terms of health and nutrition education is important. Emphasis should be placed on the existence of vitamins in locally available foods, rather than pushing them as costly medicines. Since such injections have only a short temporary effect or no effect at all, and are often overcharged for by the pharmacists, their use results in an unnecessary expenditure for many patients.

This "commercialization of health" [27, p. 301] is spreading through the promotion of pharmaceuticals, which is carried out by the drug companies, both multinational and local, and through salesmen and mass media, especially radio advertisements. Most practitioners are dependent on the pharmacists for their knowledge of pharmaceuticals. In turn, the pharmacists and also the physician is dependent on the salesmen or detail-men from the pharmaceutical companies for knowledge of the effects of new drugs [26, p. 109]. Recent studies show that in Guatemala, as well as in other Latin American countries, drug companies emphasize the benefits and indications of drugs to the physicians but minimize the hazards and adverse effects [30]. The importance of drug detail-men and pharmacists as part of a system of medical education as well as medical treatment is similarly described by Taylor [31] for a village in India.

Inappropriate treatment, miscommunication, extensive promotion and overcharging of pharmaceuticals, the prestige of modern medicines, especially injections, among other factors, often result in an overinvestment in medicine relative to people's resources (as was shown in the case studies). In addition to the health implications mentioned above are important economic implications. The overinvestment may mean buying medicines on credit, increasing one's loans and debts, and affecting the household budget with less expenditure on food and other necessities, resulting in possible negative effects on the nutrition and health of the household.

Another effect of the possible ineffective treatment from inappropriate usage of cosmopolitan medicine is increased utilization and spending on resources in the spiritual domain, thus contributing to the persistence and possible increase of folk practitioners and spiritists. At the same time, the adaptability and success of these practitioners in filling certain needs of their clients, points out weaknesses and inadequacies in the delivery and practice of cosmopolitan medical care. The multiple usage and the amount of time, money and energy people spend in seeking health care has been grossly underestimated by Guatemalan medical personnel. The pluralistic medicine practiced by the finca population is probably not unusual in this respect, and represents an important concern for future research.

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#### REFERENCES

- Guatemala—A.I.D. Extension of Health Services to Finca Workers. *Guatemala Health Sector Assessment*, Annex 5.7. Academia De Ciencias Medicas and United States Agency for International Development, Guatemala, 1977.
- This research has been carried out periodically since 1970 under the auspices of the Department of Nutrition, Massachusetts Institute of Technology and the Institute of Nutrition of Central America and Panama, and supported by the Williams-Waterman Foundation. It included collection of dietary, morbidity, demographic, anthropological, and socioeconomic data.
- Scrimshaw M. Patterns of health on a Guatemalan finca. Paper presented at the *American Anthropological Association*, Houston, Texas, 1977.
- Sobel R. Longitudinal ecological assessment of the nutritional status on a rural Guatemalan lowland plantation. Ms. thesis, Dept of Nutrition and Food Science, Massachusetts Institute of Technology, 1977.
- The term Ladino refers to people of Spanish or Western culture in contrast to people of Indian culture, including people who are descendants of Spanish or European, mixed European-Indian ancestry, and those who may be genetically Indian but who do not identify themselves as Indian culturally.
- The authors prefer to use the term "cosmopolitan", meaning worldwide rather than "modern", "scientific" of "Western" medicine because of the biases associated with these other terms. For a detailed discussion of the term "cosmopolitan medicine", see Leslie C. *Asian Medical Systems*, pp. 6–8. Univ. California Press, Berkeley, 1976.
- Adams R. Un análisis de las creencias y prácticas médicas en un pueblo indígena de Guatemala. Instituto Indigenista Nacional Publ. Especiales, No. 17, Guatemala, 1952.
- Adams R. *Cultural Surveys of Panama, Nicaragua, Guatemala, El Salvador, Honduras*. Pan American Union. No. 33, Washington, 1957.
- Woods C. and Graves T. *The Process of Medical Change in a Highland Guatemalan Town*. Latin American Center, Univ. of California, LA, 1973.
- Woods C. Alternative curing strategies in a changing medical situation. *Med. Anthropol.* 1, 25, 1977.
- Gonzales N. S. Some aspects of child-bearing and child-rearing in a Guatemalan Ladino community. *Southwest J. Anthropol.* 19, 411, 1963.
- Cosminsky S. Decision making and medical care in a Guatemalan Community. Ph.D. dissertation, Brandeis University, 1972.
- Gonzales N. S. Health behavior in cross-cultural perspective: a Guatemalan example. *Hum. Org.* 25, 122, 1966.
- Macklin J. Belief, ritual and healing: New England spiritualism and Mexican-American spiritism compared. In *Religious Movements in Contemporary America* (Edited by Zaretsky I. and Leone M.). Princeton Univ. Press, Princeton, 1974.
- Garrison V. Doctor, espiritista or psychiatrist? Health seeking behavior in a Puerto Rican neighborhood of New York City. *Med. Anthropol.* 1, 65, 1977.
- Cosminsky S. Childbirth and midwifery on a Guatemalan finca. *Med. Anthropol.* 1, 69, 1977.
- Cosminsky S. Impact of methods on the analysis of illness concepts in a Guatemalan community. *Soc. Sci. Med.* 11, 325, 1977.
- Douglas W. Illness and Curing in Santiago Atitlan. Ph.D. dissertation, Stanford University, 1969.
- Landy D. Traditional curers under the impact of western medicine. *Am. Ethnol.* 1, 103, 1974.
- Saler B. Nagual, witch and sorcerer in a Quiché village. *Ethnology* 3, 305, 1964.
- Foster G. and Anderson B. *Medical Anthropology*. Wiley, New York, 1978.
- Mendelson M. *Escandolos de Maximon*. Seminario de Integracion Social Guatemala, Guatemala, 1965.
- Cosminsky S. Changing food and medical beliefs and practices in a Guatemalan community. *Ecol. Food Nutr.* 4, 183, 1975.
- Press I. Urban folk medicine. *Am. Anthropol.* 80, 71, 1978.
- Manning P. and Fabrega H. Jr. The experience of self and body: health and illness in the Chiapas highlands. In *Phenomenological Sociology* (Edited by Psathas G.), p. 290. Wiley, New York, 1973.
- Young A. Mode of production of medical knowledge. *Med. Anthropol.* 2, 97, 1978.
- Unschuld P. The social organization and ecology of medical practice in Taiwan. In *Asian Medical Systems* (Edited by Leslie C.), p. 300, Univ. California Press, Berkeley, CA, 1976.
- Nichter, M. Patterns of resort in the use of therapy systems and their significance for health planning in South Asia. *Med. Anthropol.* 2, 29, 1978.

29. Schieb F. *et al.* Análisis del sector salud Guatemala, Vol. 1. La Agencia de los Estados Unidos en Guatemala para el Desarrollo Internacional a Guatemala, 1977.
30. Silverman M. *The Drugging of the Americas*. Univ. California Press, Berkeley, CA 1976.
31. Taylor C. The place of indigenous medical practitioners in the modernization of health services. In *Asian Medical Systems* (Edited by Leslie C.), p. 285. Univ. California Press, Berkeley, CA, 1976.

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## UN SUCCES BIEN RELATIF: LA MEDECINE OCCIDENTALE CHEZ LES INDIENS GUAJIRO

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**Résumé**—Après avoir rappelé les principes théoriques qui sous-tendent les pratiques médicales traditionnelles des Indiens Guajiro, l'auteur brosse un rapide tableau de la médecine occidentale telle qu'elle est exercée en milieu Guajiro, au Venezuela.

En donnant la parole aux Indiens, il fait ensuite un inventaire et une rapide analyse des facteurs qui, selon leur "état d'acculturation", les attirent vers l'hôpital ou les repoussent, ou bien présentent pour eux un caractère ambivalent.

Au terme de cette étude, il apparaît que les divergences et les incompatibilités entre médecine guajiro et médecine occidentale sont non seulement d'ordre formel et matériel mais aussi d'ordre social et d'ordre théorique. Le problème des relations entre les deux médecines n'a donc pas de solution simple dans le contexte guajiro actuel mais quelques actions devraient cependant être tentées d'urgence. Il faut en particulier que le praticien occidental exerçant parmi les Guajiro acquiert une "conscience anthropologique" et une connaissance approfondie de la théorie médicale indigène, ne serait-ce que pour assurer l'application et la continuité du traitement qu'il propose...

### INTRODUCTION

Aujourd'hui, la société guajiro [1] est soumise à un fort processus d'acculturation qui frappe inégalement les groupes et les individus qui la constituent et accentue une hiérarchisation et une diversification déjà grande dans la société traditionnelle. La médecine occidentale est un facteur important dans ce processus de changement: il y a près de vingt ans fut fondé un petit hôpital à Paraguaipoa, en bordure du territoire guajiro vénézuélien, et furent installés ensuite sept dispensaires répartis dans le territoire-même et visités périodiquement par un médecin. L'objectif de ces installations était et reste clairement défini [2]:

... Faire sortir de sa situation favorite l'Indien végétant dans les savanes pour lui fournir des facilités qui, ajoutées à son effort personnel indispensable, lui permettent d'atteindre un "standard" de vie en accord avec le concept intégral de santé, défini non comme simple absence de maladie et de "défectuosité" mais comme état optimal de bien-être physique, mental et social.

Le but naïf et missionnaire de ce programme de "transculturation médicale" est loin d'être atteint! Manifestement la médecine occidentale, telle qu'elle est pratiquée actuellement et malgré tous les efforts et la bonne volonté de toutes les personnes qui y sont engagées, n'a pas pu et ne pourra pas résoudre convenablement les problèmes de santé des Guajiro, même si l'on prend ce mot dans son sens le plus restreint, réfuté dans la citation précédente.

Le propos de cet article est modeste. Il veut présenter au médecin, sans les analyser dans toute leur complexité sociologique et théorique, certaines des raisons de cet échec. C'est un préliminaire nécessaire à un possible dialogue entre médecines, anthropologies et indigènes [3].

### LA MEDECINE GUAJIRO TRADITIONNELLE

En simplifiant, on peut considérer que les Guajiro distinguent deux catégories de maladies, désignées respectivement par les noms de *ayuulee* et de *wanülüü* [4].

Le terme générique *ayuulee* regroupe des maladies bénignes, aux symptômes non angoissants, des maladies à évolution lente, se manifestant de façon peu spectaculaire, enfin des maladies nouvelles introduites par les Blancs. Le traitement de ces maladies, *ayuulee* est affaire du malade lui-même ou de son entourage. Ingestion d'infusions ou de macérations de plantes médicinales ou, plus rarement, de drogues d'origine animale ou minérale, actes mécaniques tels que "massages à sec" ou "massages" avec de l'eau chaude ou des décoctions de plantes, pointes de feu—c'est-à-dire contacts rapides et brefs d'une pointe métallique chauffée au rouge dans la région malade ou douloureuse—lavements, sont parmi les techniques, très fréquemment associées, qui contribuent à libérer le corps de ces maladies *ayuulee*. Car les Guajiro se représentent celles-ci comme des phénomènes aléatoires qui viennent habiter l'organisme, l'encombrer, l'encrasser, et cette thérapeutique a pour but de "faire sortir la saleté du corps", de le nettoyer, d'extraire, d'éliminer. C'est le malade qui choisit le traitement et les dosages en fonction de son expérience passée ou de l'expérience de son groupe familial, de son voisinage. Il s'agit donc d'une médecine extrêmement pragmatique, totalement populaire, très peu spécialisée.

Les maladies que l'on groupe dans la deuxième catégorie, désignée par le terme de *wanülüü*, se distinguent des précédentes d'abord par leur caractère angoissant, mais surtout par le comportement très différent que les Guajiro ont face à ces maux. Lorsqu'un certain



seuil d'angoisse est franchi, lorsque l'individu malade et sa famille ne peuvent plus affronter seuls la maladie, ils vont consulter un spécialiste: le chamane. Celui-ci ira chercher une explication au mal dans l'univers symbolique de la société, avant d'impliquer tout le groupe social dans le processus de guérison. Une maladie *ayuulee* dont les symptômes s'aggravent devient *wanülüü*: de ce point de vue il y a continuité entre les deux. Mais une rupture, une opposition même, se fait ailleurs: pour définir la maladie *wanülüü* on évoque peu les symptômes—puisqu'on pense ne plus pouvoir les contrôler par les moyens ordinaires—mais les causes ultimes du mal, alors que précédemment on ne s'en souciait pas. En effet les maladies *wanülüü* sont censées résulter d'une rencontre (*oustawaa*) avec un être anthropomorphe, un animal, une chose ou un lieu considérés comme *pūlashi* ou *pūlasü*, c'est-à-dire dont les pouvoirs dépassent ceux des êtres ou des choses ordinaires, qui sont contaminés et contagieux, dangereux, tabous, interdits, etc.

En plus d'atteindre l'intégrité du corps en le pénétrant, en le souillant, en le blessant d'une flèche invisible, un peu comme dans le cas des maladies *ayuulee*, tous les maux *wanülüü* sont censés provoquer également le départ puis les errements de l'*aa'in* du patient, cette entité qu'il est commode d'appeler "âme" et qui, avec le corps, l'"enveloppe", la chair, constitue la personne guajiro, le *wayuu*. De plus chacun de ces maux est caractérisé par des symptômes spectaculaires—hématémèse, violentes douleurs internes, hématurie, syncope, agitation intense, etc.—sans pour autant qu'il y ait, fait notable, des relations bien définies entre les symptômes et le nom donné à la maladie. Toutes les maladies *wanülüü*—il y en a au moins une dizaine d'espèces et plus de soixante variétés (voir Fig. 1.)—sont supposées pouvoir donner la mort, c'est-à-dire, selon la théorie guajiro, provoquer une séparation définitive de l'âme et du corps.

En fait, si l'on se place du point de vue de la médecine occidentale et si l'on simplifie, on peut considérer que deux types de maux entrent dans cette catégorie *wanülüü*: des troubles organiques spectaculaires et graves qui font craindre la mort ou bien des troubles d'ordre psycho-somatique endossés par un individu mais concernant parfois tout son groupe familial...

Seuls les chamanes—des femmes à quatre-vingt pour cent chez les Guajiro—peuvent établir un diagnostic en communiquant par l'intermédiaire de leurs "esprits auxiliaires" avec le monde surnaturel dans lequel résident les êtres qui sont les causes ultimes du mal. Seuls ces esprits que les gens de l'art savent convoquer en absorbant du jus de tabac mâché, en chantant et en agitant un hochet, peuvent connaître et révéler le nom de la maladie, identifier les recéleurs ou les "chasseurs" de l'âme du malade et localiser cette dernière. Quant au traitement des maladies de la catégorie *wanülüü* il est, aux variantes personnelles près, toujours le même: à demi-dénudés, la chamane et son malade, isolés dans une hutte, sont installés face à face. La chamane appelle ses esprits auxiliaires en entrant dans une sorte de longue transe ponctuée de chants, de cris, de souffles et accompagnée du son de la maraca. Dans un langage secret, les esprits nomment alors la maladie: *pūlowisiraa*, *wanülüüsiraa*, etc, si c'est très grave, *yolujasiraa*, si cela l'est moins (voir

Fig. 1.). Ils disent ensuite les chances de guérison et énumèrent leurs exigences matérielles pour l'assurer si elle s'avère possible: bijoux, animal domestique d'aspects bien définis, etc. Une fois satisfaites ces conditions par le malade et sa famille qui exposent les objets et attachent les bêtes près de la chamane, celle-ci entreprend de nouveau un chant prolongé entrecoupé d'absorption de jus de tabac et de cris. Ces actes signifient la lutte que son ou ses esprits auxiliaires mènent pour soustraire l'âme prisonnière à ses gardiens. Ce traitement est généralement accompagné de suctions de la partie malade, d'aspersions de jus de tabac censé détenir un pouvoir quasi-magique (*pūlasü*) de guérison, mais aussi de massages, de pointes de feu ou d'administration de drogues végétales dont l'esprit auxiliaire ou les rêves de la chamane sont supposés avoir révélé la composition. On retrouve donc là les mêmes traitements que pour les maladies *ayuulee* ce qui, nous l'avons vu plus haut, s'explique bien au su de la théorie guajiro. Mais ces traitements par plantes, massages ou pointes de feu sont considérés comme secondaires et prescrits sans emphase, presque en cachette, par la chamane. Car l'essentiel est de nommer le mal et de pactiser avec les êtres et les forces surnaturels, ou même de les neutraliser, pour pouvoir ramener l'âme du patient. Si l'on n'arrive pas à ce pacte, le fond du mal n'est pas traité et les drogues, si elles agissent, ne peuvent le faire que de façon provisoire, fugace. Enfin, après plusieurs heures, voire plusieurs jours de lutte, la chamane annonce la guérison, c'est-à-dire le retour définitif de l'âme. Elle fait souvent appel à toute la communauté avec laquelle elle organise une danse traditionnelle *yonna* et divers jeux durant lesquelles elle recommande généralement une stricte abstinence sexuelle.

Une large "famille" de maux n'obéit pas exactement au schéma précédent. Il s'agit des maladies des enfants en bas âge, des accouchements difficiles (dystocies) et des malformations que les Guajiro regroupent sous les termes *sipūlainwaa* ou *pūlajüwaa*. Ces maux sont censés être provoqués soit par des animaux dits *kapūlainsü*, c'est-à-dire "portant en soi la contamination", soit par des êtres humains qui ont les mêmes facultés de contaminer pour avoir commis un homicide ou pour avoir manipulé les ossements humains lors des secondes obsèques ou bien le cadavre de la victime d'un homicide, soit enfin par des objets *kapūlainsü* plus ou moins liés à la mort, tels le fusil, le cercueil, etc. [5]. Cette place particulière qu'occupent les maladies infantiles dans la nosologie guajiro provient certainement de leur grande fréquence et de la forte mortalité néonatale et infantile qui sévit dans cette société et elle se retrouve dans la position que l'enfant occupe dans la pensée guajiro. En effet un enfant en bas âge n'est pas considéré par les Guajiro comme un être totalement humanisé, un peu comme s'il n'avait pas une âme à part entière. Certains d'ailleurs affirment que l'âme des enfants n'est pas complètement "coagulée" ou "agglutinée". D'autres disent que lorsqu'un enfant meurt son âme ne va pas dans la terre des morts (*Jepira*) mais "monte droit vers le ciel". Cela se reflète dans le rituel funéraire: pour les enfants il n'y a pas toujours de doubles obsèques et la cérémonie d'enterrement, très brève, est dans tous ses aspects beaucoup plus discrète que pour un mort adulte. Pour traiter ces maladies *pūlajüwaa* il

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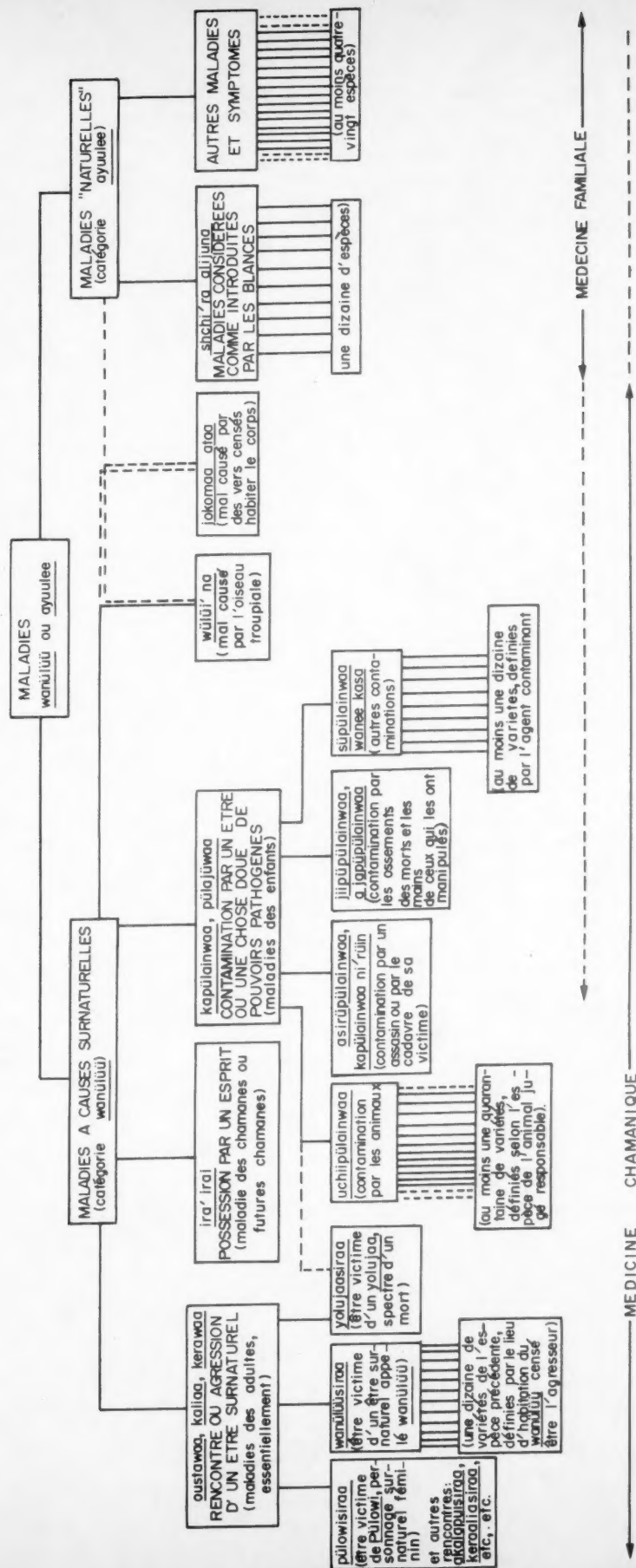


Fig. 1. Les grandes lignes de la nosologie Guajiro.

faut nécessairement faire appel à des chamanes, à des devins, ou à de "bons rêveurs", c'est-à-dire des personnes qui reçoivent de leurs esprits ou en rêve la révélation du diagnostic et de la cure appropriée. Car elles ne peuvent étre vraiment guéries que si la cause ultime de la maladie est connue, qu'il s'agisse du nom de l'animal responsable, de celui de l'individu qui a touché ou a posé par hasard son regard sur l'enfant ou de celui de l'objet contaminant. Les seuls remèdes réellement efficaces sont faits à partir de ces animaux et de ces objets ou leur sont logiquement associés, ou bien la cure nécessite la présence de la personne qui a "infecté" le petit malade. Par exemple pour une contamination par la perruche (*süpülainwaa kale'kale*) il faut aller chasser cet animal et faire absorber à l'enfant une décoction de ses plumes. Théoriquement, seuls les chamanes (ou les "bons rêveurs") peuvent déterminer avec certitude ces causes et ces remèdes. Mais en fait, nous en verrons un exemple, lorsque l'état du malade ne s'améliore pas les chamanes modifient leur précédent diagnostic en nommant une autre espèce animale. Ils procèdent ainsi par tâtonnement jusqu'à ce que l'enfant guérisse ou jusqu'à ce que ses parents aillent consulter... d'autres chamanes. Dans le cas de ces maladies *püajüwaa* la cure chamannique a un caractère très discret, puisqu'il n'est plus question de mimer les combats pour délivrer l'âme prisonnière, mais simplement de deviner la nature de l'agent responsable.

La figure No 1 résume l'ensemble de ces informations et donne les grandes lignes de la nosologie guajiro.

#### LA MEDECINE OCCIDENTALE EN GUAJIRA VENEZUELIENNE

La médecine exercée au dispensaire de Paraguaipoa présente les caractères classiques de la médecine hospitalière que nous connaissons tous, auxquels viennent s'ajouter des difficultés d'ordre linguistique: la moitié du personnel infirmier est bilingue, mais les médecins ignorent tout de la langue guajiro; certains Guajiro parlent ou comprennent bien l'espagnol, mais d'autres très mal. Au terme d'un interrogatoire bref et souvent difficile, souvent suivi d'un examen, le patient illettré se retrouve dehors. Il a en main une *resita*—une "recette", une ordonnance—que le praticien a accompagnée de recommandations énoncées en langue espagnole et retransmises si nécessaire par un infirmier. Certaines sont parfois fort peu réalistes: "acheter des petits pots de compote de pomme, boire du 'Coca-cola' pendant la durée du traitement", etc. Il a reçu aussi un ou deux médicaments qui lui ont été donnés gratuitement tandis qu'il devra en acheter un ou deux autres dans la pharmacie locale, ce qu'il fera rarement. Il prendra ces médicaments tant bien que mal durant quelques jours, puis il les abandonnera s'il n'a pas alors observé d'amélioration notable, se gausant même parfois du *Too'tolu* (le Docteur) peu avenant et de son impuissance. Pourtant, pris dans un réseau d'offres nouvelles dans lequel la médecine occidentale est inéluctable, il reviendra peut-être plus tard renouveler la même expérience...

Plusieurs éléments frappent à la lecture des registres des centres sanitaires et à l'écoute des médecins. Il y a tout d'abord une proportion très grande de

consultations pédiatriques. Cela tient à la fréquence et à la gravité des maladies infantiles—hélminthiases, amibiases, gastro-entérites, avitaminoses, etc.—endémiques chez les Guajiro et devant lesquelles les chamanes sont souvent désarmés et le montrent clairement en émettant des diagnostics fort incertains. De plus les Guajiro, fortement encouragés à présenter leurs enfants pour des visites préventives, ont pu constater certains succès en ce domaine de la médecine occidentale. Comme pour eux le jeune enfant est moins impliqué dans la symbolique et pas encore considéré comme une personne à part entière, il ne coûte rien—au sens propre et au sens figuré!—de le confier à un thérapeute étranger.

Par contre, les adultes attirés par le système hospitalier sont souvent très réticents devant la médecine qui leur est offerte. Cela tient à des raisons symboliques et théoriques liées, nous le verrons plus loin, à l'interprétation guajiro de la maladie, ignorée de ceux qu'ils vont consulter, mais certainement aussi à l'étrangeté des méthodes employées. Nombreux sont en effet les traits qui opposent médecine chamannique et médecine occidentale: pénombre, demi-nudité du chamane, contact corporel intime et prolongé entre chamane et malade, dialogue, participation intense du thérapeute qui sort épuisé de la cure contrastent avec le déshabillage en pleine lumière, l'auscultation en présence d'inconnus, l'interrogatoire saccadé et bref des clients de l'hôpital, sans parler de l'examen gynécologique auquel grand nombre de femmes guajiro se refusent, de la prise de sang, etc.

Un autre fait est saillant: la proportion des consultations des adultes de sexe masculin est extrêmement faible, de l'ordre de un homme pour six femmes. Cela tient en partie à ce que les femmes, à l'occasion de visites pédiatriques pour leurs enfants, sont amenées à consulter pour elles-mêmes; d'autre part elles sont fortement poussées à aller subir des examens pré-nataux à l'hôpital.

Avant d'examiner dans le détail différents points de vue guajiro face à la médecine, soulignons une conséquence inattendue des disparités évoquées ci-dessus: les médecins et les informations officielles des services de santé donnent une image déformée de la morbidité et de la mortalité guajiro et ils surestiment certainement beaucoup l'efficacité de leurs actions [6].

#### POINTS DE VUE CONTRADICTOIRES

##### *Du côté des clients guajiro*

Les Guajiro qui l'utilisent ne sont unanimes ni pour condamner la médecine occidentale qui leur est offerte, ni pour la louer inconditionnellement.

En 1975, puis en 1977, les médecins stagiaires m'ont permis d'interroger leurs patients guajiro lorsqu'ils les consultaient à l'hôpital de Paraguaipoa ou dans l'un des centres sanitaires associés. J'ai pu ainsi entendre les avis d'une centaine de personnes qui s'étaient risquées à la médecine occidentale et connaître le cheminement qui les y avait amenées.

Pour les unes, peu nombreuses, la réponse est catégorique:

"... Moi, les chamanes, je ne les connais pas. Je ne crois qu'aux Docteurs et à Dieu; je ne crois pas aux spiritistes ('espiritistas')..."

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Ce sont surtout des métis ou des Guajiro très "modernistes", ayant quitté le territoire traditionnel, parfois élevés dans un "orphelinat" catholique ou soumis à l'action des Évangélistes opérant près de Paraguaipoa.

D'autres ont eu un itinéraire fort sinuex. Un exemple extrême est le cas de cette femme de *Wü'ichepü*, lieu-dit situé à cinq ou six kilomètres au nord de Paraguaipoa, qui amène en consultation un enfant âgé de quatre ans présentant le teint jaune—un ictère s'ajoutant probablement à une amibiase ou une hélminthiase ancienne—:

... Je suis venue ici il y a un an. Mon fils avait la diarrhée, avec du sang. Le docteur ne put rien faire. La diarrhée ne s'arrêtait pas. Il m'a donné une drogue. Cela n'a rien guéri.

Alors je suis allée chercher un chamane appelé J., qui est aussi un devin. Il vit près de *Kusi*. Je crois que c'est un menteur... Il demanda de l'argent. Il demanda un litre d'eau-de-vie et du tabac, pour deviner. "Je vais reconnaître l'enfant, je vais chercher le nom de sa maladie" dit-il alors.

Il se mit à regarder la bouteille d'eau de vie. "Ce qu'il faut pour le guérir est un *kaché'pa'ulü*, un carcajou (*Procyon cancrivorus*), car il s'agit d'une contamination par le carcajou: *süpülainshi kaché'pa'ulü*. Si vous en trouvez un très vite, l'enfant peut être sauvé. Vous le salerez, vous le ferez cuire et vous donnerez du bouillon au malade. Les os, vous les ferez bouillir dans de l'eau avec laquelle vous baignerez ensuite l'enfant..."

Mais avec cela l'enfant ne guérit pas. "Il est aussi victime de l'oiseau *si'aa*, le troupiale (*Icterus nigrogularis*)," dit alors le chamane. "Faites brûler des plumes de cet oiseau et badigeonnez le visage du petit avec la cendre. Ainsi la maladie s'en ira".

Mais cela ne guérit pas le mal. Le chamane dit ensuite: "*süpülainshi kale'kale*: c'est une contamination par la perruche. Qu'on en brûle les plumes!". L'anus de l'enfant était très rouge... On alla chasser une perruche. On brûla ses plumes et on les réduisit en poudre. On mit la poudre sur l'anus de l'enfant. Mais après il avait encore la diarrhée. Il dit alors que c'était à cause du *patajawa*, le vautour aura (*Cathartes aura*). Nous partîmes à *Ayajui* pour en chasser un. Mais on n'a pas pu en trouver. "C'est aussi à cause de la tourterelle *iruui* (*Oreopeleia linearis*). Il va manger les pattes rouges de cet oiseau et vous ferez aussi de la poudre des pattes calcinées pour en mettre autour de l'anus très rouge" dit-il ensuite.

Le chamane fit essayer aussi l'iguane: "Il va manger cela! Donnez-lui-en". Il demanda encore des bijoux en or, des colliers, de l'argent, jusqu'à ce qu'enfin il parte sans avoir réussi à le soigner.

Cela avait duré environ deux semaines. Mon fils était dans un état très grave. Je suis allée alors consulter une autre chamane, R.M., qui vit au nord de *Wü'ichepü*. Elle m'a dit que c'était une contamination par le cerf matacan (*Mazama americana*). Un parent de la chamane est allé chasser cet animal. On a fait cuire une patte et on a servi le bouillon à l'enfant. La chamane a également donné une drogue contre la diarrhée, les feuilles d'une plante, présentées sous la forme d'un bâtonnet. Elle m'a pris cinquante bolivars plus cinq bolivars pour le remède (environ 10\$ et 1\$). Le garçon a guéri aussitôt. La chamane ne m'a rien demandé d'autre. Elle a chanté un moment encore, puis elle est partie.

Mais aujourd'hui, le petit est encore malade..."

Qu'est-ce qui a attiré de nouveau cette femme à l'hôpital? La gratuité des soins et des médicaments, dit-elle. C'est, fait trop négligé, ce qui séduit beaucoup les Guajiro dans la médecine hospitalière. Les chamanes, parce qu'ils font payer, parfois cher, sont

devenus pour la cliente de *Wü'ichepü* un pis-aller qu'elle consulte uniquement en cas d'échec de la médecine hospitalière:

... Si ça ne va pas avec les docteurs, j'irai voir un chamane. Mais les chamanes demandent beaucoup de choses: des vaches, des chèvres, des bijoux. Les docteurs, au contraire, ils sont là et ils ne demandent rien...

On m'a cité le cas de chamanes qui, en plusieurs visites avaient extirpé plus de mille bolivars à leurs clients, sans résultat durable. De fait il ne s'agit plus là de chamanes traditionnels mais d'individus qui ont calqué leurs méthodes sur celles des guérisseurs ruraux du Venezuela. Généralement, ils ne travaillent pas dans leur communauté: on va les consulter dans la banlieue de Maracaibo ou à Maicao [7], au même titre que les fameux "sorciers" arauak que certains guajiro vont voir au terme d'interminables voyages qui les emmènent dans la Sierra de Santa-Marta.

Mais lorsque, déçus par la médecine hospitalière, ou non informés du coût des consultations en dehors de l'hôpital, des Guajiro font appel à la médecine privée et payante, en allant consulter des praticiens installés dans les petites localités situées au sud de Paraguaipoa ou à Maracaibo, leurs critiques contre le médecin sont, en cas d'échec, d'une grande violence, bien plus grande que contre un chamane impuissant:

... Les docteurs sont des menteurs. Ils ne disent jamais que l'on va mourir. "Ça va aller mieux avec cela" affirment-ils, et ils font payer. Ils volent les gens... Il faut toujours payer, même si le malade ne guérit pas, même s'il meurt. Les docteurs sont de mauvaises gens...

Car il y a une radicale différence, au niveau économique, entre les manières des Occidentaux et celles des Guajiro. Chez les Blancs, les prix ne sont fonction ni du résultat thérapeutique, ni de la gravité du diagnostic, soit que l'on paie toujours la même somme chez le médecin privé, soit que l'on ne paie rien du tout à l'hôpital. Chez les Guajiro le coût de la cure est généralement fonction de la gravité supposée de la maladie, de l'effort du chamane dans son dialogue avec ses esprits et sa lutte contre le monde surnaturel et, théoriquement, de son succès. Cela explique en partie le soin que ce dernier met à persuader son malade qu'il est guéri, ainsi que son entourage, attitude qui stimule peut-être le processus de guérison mais qui, diront les médecins, risque surtout d'entraîner des retards irrémédiables dans le traitement de certaines urgences que seule la médecine hospitalière sait affronter.

Mais une observation plus attentive montre des réticences plus profondes. Si les Guajiro vont consulter facilement les médecins lorsqu'ils sont atteints de maladies qu'ils considèrent de type *ayuulee*, qu'ils pensent et traitent un peu à la façon occidentale, et pour lesquels ils reçoivent des Blancs des médicaments tout faits, il n'en est pas toujours de même lorsqu'ils se considèrent frappés de maladies de type *wanülüü* qu'ils conçoivent et soignent de manière très différente. Ceux qui, suffisamment bilingues veulent dans ce cas confier au médecin leurs convictions profondes sur la nature de leur mal s'en voient dissuadés au nom d'un manque de temps ou, pire, ils ne reçoivent que moquerie et incrédulité. Ils s'en vont vexés,



mais ils en concluent aussi que "le docteur ne peut pas guérir une maladie qu'il ne connaît pas. En effet le docteur en ignore les causes ultimes, par exemple avoir été fléchi par un *wanülüü* ou regardé par un *yolujaa*, et également les causes immédiates puisqu'il nie ou méconnaît la notion de départ de l'âme. Cet abandon de la thérapie occidentale est certainement justifié lorsque le mal est d'ordre purement psychosomatique ou social car le médecin est actuellement incapable de répondre à la demande du patient. Mais il est bien regrettable quand il s'agit de lésions somatiques graves. Certains échecs de la médecine occidentale face à des cas de ce dernier type ont confirmé les plus traditionalistes dans cette opinion que la médecine des Blancs est inadaptée et la proportion de ceux qui, atteints de *wanülüü* se rendent à l'hôpital paraît être relativement faible.

Si ce point était confirmé par une étude statistique, on aurait démontré que notre médecine a tendance à priver les Guajiro de ses bienfaits dans les cas où elle serait, médicalement parlant, la plus utile, par exemple pour le traitement des tuberculoses avancées, des ulcères, des appendicites, des pneumonies, des pleurésies, etc. qui, en raison de leurs symptômes angoissants entrent dans la catégorie *wanülüü*. Une grande partie de ses efforts consisterait à prescrire des médicaments destinés soit à traiter des "maladies banales" telles le rhume, la rhinopharyngite, etc. qui pourraient être soulagées par la pharmacopée et la thérapie guajiro [8], soit à effacer pour quelques heures les symptômes de maux endémiques tels que les nausées dues aux amibiases, les céphalées causées par l'anémie, les diarrhées provoquées par les hélmintiasés, etc. On n'allait pas chercher le chamane pour soigner ces maux et, de ce point de vue, la médecine occidentale n'est donc pas entrée directement en concurrence avec la médecine chamannique: elle a suscité une nouvelle demande et créé une dépendance. Et, faute d'action éducative, ses actes thérapeutiques restent dans bien des cas épisodiques et superficiels.

Nombreux sont pourtant aujourd'hui les Guajiro vivant dans une zone géographique proche des installations sanitaires qui voudraient bénéficier des deux systèmes en présence car ils les jugent plus complémentaires qu'incompatibles. Mais cela les entraîne dans d'incessantes hésitations entre des prescriptions contradictoires et ils n'en poursuivent aucune. Ils deviennent les victimes privilégiées de l'indifférence ou de l'hostilité ouverte entre médecins et chamanes. C'est presque toujours le cas pour les maladies de type *supülainwaa*, ces "contaminations" qui frappent les bébés et les jeunes enfants et pour lesquelles les Guajiro n'hésitent pas à consulter les médecins. L'action médicale est souvent positive mais de brève durée car le traitement, entrecoupé ou relayé par les médications traditionnelles, n'est pas prolongé suffisamment longtemps. Cela tient aussi au fait que les maladies correspondantes sont endémiques en Guajira.

Mais il reste un élément indubitablement positif dans notre intrusion médicale: la médecine préventive. Par la vaccination sur le terrain elle a, entre autres, provoqué une régression spectaculaire de la tuberculose et de la variole. Cela n'est pas paradoxal: par la brièveté de son intervention elle n'implique pas de réel choc culturel et les Guajiro s'y soumettent volontiers.

#### *Du côté des spécialistes, médecins et chamanes*

Les médecins vénézuéliens ont fréquemment traité les chamanes guajiro de criminels ou les ont accusés des pires vilénies. Si l'on en croit les témoignages de ces derniers certains même auraient été traînés devant la justice.

... Les chamanes, c'est un sacré truc! Elles exigent beaucoup d'argent et elles n'ont aucune efficacité. Parfois même, ce sont des calamités! Elles s'accrochent aux malades et ils arrivent ici dans un état désespéré, complètement brûlés par des pointes de feu... Les malades guajiro sont les victimes des chamanes...

Mais à côté de ces jugements radicaux—celui-ci, plus étayé par des on-dit que par une réelle expérience, a été émis par un jeune médecin nouvellement arrivé parmi les Guajiro—d'autres sont plus nuancés:

... Les chamanes, je ne les connais pas. Il est difficile de parler avec eux. Il y en a beaucoup qui se disent chamanes et qui ne le sont pas. Ils mentent, il faut faire attention...

J'ai d'autre part rencontré des médecins qui méprisaient les Guajiro pour des raisons très subjectives. Par exemple, l'un d'eux prétendait l'absence de pleurs devant la mort d'un enfant, dont il avait été témoin, pour évoquer leur abominable "manque de sensibilité". Etrange contre-sens lorsqu'on sait l'importance que les Guajiro accordent à la mort, toujours hantés par sa présence et par celle de la maladie et de ses émissaires [9] et surtout l'affection qu'ils témoignent généralement à leurs jeunes enfants.

Mais on cite parfois comme exemplaire le cas d'un médecin qui, il y a quelques années, à Paraguaipoa, a permis à une chamane d'assister à l'hôpital l'un de ses clients qui était d'autre part soumis à un traitement d'urgence. La chamane a chanté plusieurs jours. Entre temps les infirmiers administraient des soins. Cette initiative est restée unique et paraît encore cocasse aux yeux de certains. Serait-ce une solution pour retenir le temps d'un traitement ceux qui sont persuadés d'être atteints d'un mal de type *wanülüü*?

Les jugements et les attitudes des chamanes face aux médecins sont plus nuancés. Tous ont réfléchi au problème et ils ressentent unanimement la concurrence de la médecine occidentale que beaucoup jugent déloyale, en raison d'abord de sa gratuité.

Certaines vieilles chamanes reconnaissent qu'elles n'ont pas reçu la visite de clients depuis longtemps, ou qu'elles en reçoivent très épisodiquement:

... Avant je soignais tous les malades, ceux qui étaient dans un état très graves et les autres. Mais maintenant ils ont peur, à cause du prix, et il y a peu de riches par ici. Pourtant, de temps en temps, des gens viennent. Mais parfois, ils n'ont même pas un écheveau de coton à donner! Maintenant ils vont là-bas à Maracaibo, à El Moján, à Paraguaipoa. Et quand on les renvoie ils reviennent me voir ici, s'ils sont riches. Les pauvres meurent, c'est tout...

D'autres, nostalgiques ou clairvoyants, tentent d'adapter leurs pratiques aux influences nouvelles et elles se spécialisent dans la "contre-sorcellerie" propre aux guérisseurs "criollos" voisins:

... Aujourd'hui il y a ici moins de gens malades de *Pülowi*. Les chamanes disaient autrefois que ses victimes étaient

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nombreuses. Elles lui tendaient des pièges. Des hommes restaient cachés longtemps pour flécher un *wanülüü*.

Maintenant cela est rare, parce qu'il y a des camions dans la nuit, avec de fortes lumières, avec des bruits de sirène. *Pülowi* et les *wanülüü* se sont cachés plus haut dans la Guajira, à l'intérieur des terres, dans les régions montagneuses. Ici, ils ne viennent presque plus... Ce qu'il y a beaucoup aujourd'hui, ce sont les *maa't* (de l'espagnol "mal"), les mauvais sorts...

Il y a aussi des chamanes qui tentent d'intégrer les croyances nouvelles de ceux qui viennent les consulter. Elles affirment que leurs esprits auxiliaires "travaillent avec Dieu":

... Nos bons esprits sont là où est le Christ. "Je viens voir la maladie" dit notre esprit à Dieu. Et Dieu lui donne la permission de chercher. "Tu peux aller voir" lui dit-il...

Cette attitude mène bien sûr à l'affaiblissement du système traditionnel de connaissances et rejoint, au niveau du langage et à celui de l'"utilisation sociale de la maladie", les expériences de bricolage que nombre de familles guajiro font avec les ingrédients nouveaux venus de la société occidentale. J'ai vu ainsi soigner des otites avec de l'essence, des blessures avec de l'huile de vidange—à laquelle certains médecins reconnaissent d'ailleurs des vertus antiseptiques—des angines avec de l'atropine à haute dose, etc.

Quelques chamanes, entraînés par ce mouvement, émigrent à Maracaibo et tentent de répondre aux attentes d'une nouvelle clientèle composée de Guajiro urbanisés, de métis et même de "criollos":

... Mon grand-père, qui était chamane, est venu à moi après sa mort. À mes yeux, il était comme avant. "Tu ne dois plus travailler avec les Guajiro. Tu vas aller là-bas 'chamaniser' pour les riches *alijuna*, les riches Blancs. Tu travailleras pour celui qui a des difficultés, pour celui qui est amoureux, pour ceux qui ont des ennuis dans leur travail, pour les Blancs qui ne connaissent pas les drogues pour soigner leurs douleurs... Cela, c'est pour toi..."

Mais nombreux sont encore les chamanes qui défendent leur savoir contre celui des médecins, qu'ils nient partiellement, insistant sur la spécificité de leur technique liée à la double conception guajiro de la maladie évoquée au début:

... Le docteur refuse le jus de tabac: ça le dégoûte. Notre manière est très différente de la sienne. Nous sommes *pülashi*, nous avons des pouvoirs supra-humains, surnaturels. Nous ne nous servons pas immédiatement des médicaments. Nous chantons d'abord sur les malades, pour faire revenir leur âme. Ensuite seulement nous leur donnons une drogue, une racine par exemple...

... Le chamane sait plus de choses que le docteur blanc. Il pourrait parler aussi bien que lui, il pourrait demander: "Où as-tu mal? Qu'est-ce que tu as?" à celui qu'il soigne. Ce n'est pas pas difficile! Mais nous, nous n'avons pas besoin d'interroger, c'est notre esprit auxiliaire qui nous dit tout, car nous sommes *pülashi*...

Nos rêves nous disent aussi ce qu'il faut faire: "Pourquoi dors-tu? Réveille-toi! Donne-lui ceci, donne-lui cela, masse-le, il peut vivre encore!" dit le rêve. Par contre, le docteur ne sait pas rêver. Pourtant il est plus respecté que nous. On lui donne de l'argent sans qu'il le demande..."

Tous insistent également sur la mauvaise foi du médecin lorsqu'il échoue et sur la partialité de la justice nationale:

... Le médecin le cache toujours lorsque quelqu'un meurt

entre ses mains, pourtant on ne lui fait rien si son malade meurt... De même il ne veut jamais avouer à son patient qu'il va mourir.

Nous, nous savons dire qu'il n'y a pas de remède. Le médecin, jamais. On nous met en prison parce que le malade est mort, ou pour l'argent que nous avons reçu et tout ce que l'on nous a donné. Le médecin, jamais...

Le médecin est un menteur...

Le domaine dans lequel les chamanes défendent le plus vivement les techniques traditionnelles est celui de l'obstétrique. La fréquence des accouchements par césarienne, l'attitude face au nouveau-né sont autant de facteurs qui soutiennent leurs attaques contre les maternités qui, par ailleurs ont un réel succès parmi les Guajiro vivant à proximité:

... Les Blancs ne savent qu'ouvrir le ventre. Ou bien ils coupent, depuis le sexe jusqu'au cul, et ils ouvrent. Alors, ils sortent l'enfant...

Par contre la chamane sait faire retourner le bébé. Elle lui touche la tête, elle le pétrit dans le ventre, elle le fait basculer. Le Blanc, il ouvre la femme, c'est tout! Avec les Guajiro elle n'a pas de graves blessures, tout juste une petite coupure, à cause de ce qui est sorti...

Pourtant, aujourd'hui, les femmes guajiro vont à l'hôpital. Elles arrivent là-bas en disant: "C'est pour que mon enfant soit bien". Ce sont des mensonges! Là-bas, les enfants meurent aussi...

Les Blancs ne savent pas s'y prendre avec les nouveaux-nés. Ils les nettoient, c'est tout. Nous, nous leur massons la tête pour qu'ils deviennent beaux. Avec les Blancs, ils ont la tête comme une pelote, tout déformée. Dans ce travail, le Guajiro est bien meilleur que le Blanc, il pétrit les mains, les jambes. Beaucoup de Blancs ont les jambes tordues, d'autres les ont toutes écartées, tandis qu'avec les chamanes guajiro, les bébés sont beaux...

Si les Guajiro sont attentifs, ils sont bien capables de soigner leurs bébés. Ils peuvent raper une plante et la leur donner s'ils ont la diarrhée. Les Blancs, eux, si leurs enfants ont la diarrhée, ils courent voir le docteur. Et pourtant la diarrhée ne s'arrête pas avec une seule cuillerée, ni même avec une seule bouteille...

Ce sont les manières des Blancs et ce sont des mensonges. Souvent lorsque les enfants d'ici vont les voir, ils les rendent morts. Un Guajiro qui veille bien sur son enfant peut le garder vivant...

Si des médecins accusent les Guajiro de provoquer des tétanos néonataux en coupant le cordon ombilical des nouveaux-nés dans de mauvaises conditions, les chamanes guajiro reprochent vivement aux médecins de le jeter ou "de le laisser traîner n'importe où", ce qui ne manque pas de rendre l'enfant malade, victime d'une maladie *pülawüwaa*. C'est pour certains Guajiro une raison suffisante pour ne pas accoucher en maternité [10].

Mais nombreux sont les chamanes qui rêvent d'une coopération avec le corps médical et envisagent avec lui une répartition des tâches:

... Le *yolujaa* peut nous flécher. Aïe, quelle douleur! C'est comme quelque chose qui nous pique très fort. Voilà ce que nous, chamanes, nous pouvons soigner. Les docteurs ne savent pas guérir cela...

Ce que peuvent guérir les Blancs, les docteurs, c'est autre chose. C'est ce qui forme une boule à l'intérieur de nous. Alors ils le coupent. De même quelqu'un qui a quelque chose de mauvais dans sa chair, celui qui a mal ici, au ventre, celui qui a le sang sans force, celui qui a eu un accident et qui a été blessé, ..., tous ceux-là peuvent être

guéris par le docteur qui sait aussi soigner les maladies de la peau...

Nous, nous voudrions des amitiés avec les docteurs, dans cette terre de Maracaibo. Nous devrions nous asseoir à côté des Blancs, nous devrions y avoir des amis. Certains nient notre parole, mais d'autres peuvent dire ce que nous sommes...

J'ai rencontré une chamane qui a mis en pratique cette coopération puisqu'elle envoie les malades qu'elle ne peut pas guérir chez les médecins spécialistes de Maracaibo dont les noms, dit-elle, lui seraient révélés par ses esprits auxiliaires durant la cure chamanique. Cette coopération est jusque-là restée unilatérale...

### CONCLUSION

Les divergences et les incompatibilités entre médecine traditionnelle guajiro et médecine hospitalière sont donc de trois ordres:

. D'ordre pratique: les techniques médicales employées, les attitudes des praticiens face au malade, les relations au corps et au temps, les relations entre le coût et la réussite des soins, etc. sont radicalement différentes dans les deux systèmes.

. D'ordre social: lorsqu'un malade guajiro et son groupe familial sollicitent l'intervention d'un chamane, la demande implicite dépasse toujours le cadre strictement médical et individuel. Et, qu'il s'agisse de guérir ou d'aider à mourir, la réponse que donne le chamane—c'est-à-dire le diagnostic, le traitement qu'il impose et tout son déroulement—peut dépendre autant du mal spécifique du sujet que de la position sociale de ce dernier ou des problèmes propres à son lignage. Complètement étranger à la société guajiro, le médecin ne peut pas répondre à ce type de demande.

. D'ordre théorique: la conception guajiro de la maladie et le chamanisme sont très éloignés de la conception occidentale de la médecine. Accepter les principes de la médecine occidentale c'est, pour un Guajiro, remettre en question l'ordre et la cohérence du monde symbolique traditionnel.

Mais en fait, il s'agit là d'une simplification trop grande. Car, d'une part ces trois niveaux sont interdépendants; d'autre part la société guajiro est en cours d'acculturation: elle est aujourd'hui complexe et conflictuelle et s'y affrontent des groupes d'intérêts et de mentalités parfois très divergents.

Dans cette diversité chaque jour mouvante il est impossible d'imaginer un programme de santé global, adapté à tous les Guajiro. Face au malade indien se présente un éventail qui va de la médecine traditionnelle à la médecine occidentale et aussi à la médecine populaire vénézuélienne des guérisseurs ou des sorciers, surtout dans les régions nouvellement occupées par les Guajiro. Parfois le choix du patient est net—et en accord avec son "degré d'acculturation"—mais le plus souvent il est pris dans un réseau de raisons contradictoires qui le font hésiter ou louvoyer sans cesse.

Cependant, même s'il n'existe aucune solution théorique dans une telle situation de conflits et de changements, des actions urgentes doivent contribuer à donner à la médecine occidentale, aujourd'hui demandée par un grand nombre de Guajiro, un rôle positif. Ce point a été développé, ailleurs [11] mais il

vaut ici la peine de rappeler les principales mesures que nous préconisons et que nous tenterons de faire prendre en compte par les organismes et les responsables directement intéressés:

. Travail de recherche médicale sur le terrain pour faire une évaluation objective de la morbidité spécifique guajiro et des facteurs endémiques: la présente étude et ses développements ont montré que l'on en a une image déformée et partielle.

. Recherche pharmacologique en laboratoire pour évaluer en termes occidentaux l'efficacité de la pharmacopée guajiro: ce travail est en cours, rendu possible par la collecte des plantes médicinales guajiro et l'étude approfondie de leur usage traditionnel que nous menons depuis quatre ans.

Ces recherches ont deux buts: connaître les besoins médicaux de la société guajiro selon les critères occidentaux et apprécier objectivement les méthodes traditionnelles.

. Action éducative: tout médecin travaillant ou devant travailler avec les Guajiro doit au préalable recevoir un enseignement qui d'une part lui donne une "conscience anthropologique"—c'est-à-dire le persuade de la valeur, de la cohérence et de la qualité unique de cette société autre—et d'autre part lui apporte une connaissance approfondie de la conception indigène de la maladie et des techniques médicales utilisées. Cela devrait l'inciter à dialoguer avec son malade, à lui expliquer ensuite son action thérapeutique tout en respectant celle de son patient, souvent compatible avec la sienne [12]. Cela encouragerait celui-ci à revenir et permettrait au moins un traitement suivi.

. Action revendicatrice: face à la situation actuelle les Guajiro qui, heureusement, ont de plus en plus accès à la parole, ont le droit et le devoir de contester les services médicaux qui leur sont actuellement accordés. Nos études peuvent leur donner la confiance et des arguments pour le faire. C'est la médecine occidentale qui doit s'adapter à la culture guajiro et non les Guajiro qui doivent renoncer à leur culture pour pouvoir bénéficier des bienfaits de la médecine.

. Mesures pratiques. Il faut encourager une participation importante des Guajiro au côté des médecins nationaux; leur donner la responsabilité de soins primaires, collaborer avec les chamanes et les tout récents "curanderos" guajiro, former des médecins indigènes, etc. Enfin des détails matériels doivent être aménagés: présentation des drogues adaptée à une société sans écriture, mobilité plus grande des médecins, etc.

Bon sens ou utopie? Les récentes observations faites par l'Organisation Mondiale de la Santé qui dénonce "l'incapacité de la médecine occidentale à venir en aide aux trois-quarts de l'humanité" est un sérieux encouragement à une coopération entre indigènes, médecins et anthropologues pour trouver des solutions originales à ce problème chaque jour plus dramatique.

### REFERENCES

1. Les Guajiro seraient actuellement une centaine de mille, répartis dans la "Péninsule de la Guajira" située à l'extrême nord de l'Amérique du Sud et partagée par la frontière entre la Colombie et le Venezuela. Plu-

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- sieurs milliers de Guajiro vivent aussi dans des bidonvilles à Maracaibo et d'autres se sont exilés au sud du lac de Maracaibo et près de la Sierra Perija. Les faits évoqués ici ont été observés pour la plupart dans la partie vénézuélienne mais les mêmes remarques pourraient être étendues à la Guajira colombienne. L'auteur travaille avec les Guajiro depuis 1969. Il a vécu parmi eux plus de deux ans, au cours de plusieurs missions (1969-1970, 1973, 1975 et 1977).
2. Los programas de salud en la Guajira venezolana (Ponencia presentada por el Servicio de Salud Pública de Estado Zulia y el Comité de Salud del Proyecto Guajira). In *Boln indig. Venez.* XII-XV, 100, 1967.
  3. Ce thème est développé dans: Perrin M. Antropólogos y médicos frente al arte guajiro de curar. In *Montalban*, Vol. 10. U.C.A.B., Caracas, 1980 (sous presse: 110 pages dactylographiées), texte qui est également une sorte d'encyclopédie de la médecine traditionnelle guajiro.
  4. Pour une étude plus détaillée voir: Perrin M. Théories et pratiques médicales guajiro. In *Actes du XLIIe Congrès International des Américanistes*, Vol. 6, Paris, 1979. Un recensement quasi-exhaustif de la nosologie et de la pharmacopée guajiro ainsi qu'une première tentative d'évaluation en termes occidentaux sont présentés dans: Perrin M., *op. cit.* [3].
  5. En langue guajiro les mots désignant les différentes espèces de maladies *pūlajūwaa* sont les suivants: *uchii-pūlainwaa* (de *uchii*, animal)—comprenant un grand nombre de variétés, selon le nom de l'animal jugé responsable—*asirūpūlainwaa* (de *asirū*, victime d'un homicide), *ajapūpūlainwaa* ou *jiipūpūlainwaa* (de *ajapū*, main et *jiipū*, os), "*sūpūlainwaa wanee kasa*", littérale-
  - ment "être contaminé par quelque chose", etc. Voir Fig. 1 et se reporter à Perrin M., *op. cit.* [3], "anexo No. 1" où est donnée une description détaillée de ces maladies et des traitements correspondants.
  6. Ce point est développé dans Perrin M., *op. cit.* [3].
  7. Ces nouveaux spécialistes prennent chaque jour une importance plus grande: *kuranteerū* et *epiritiita* ("curanderos" et "espiritistas") guajiro se multiplient très vite dans la région située entre Paraguaipoa et Maracaibo, dans les territoires nouvellement occupés par les Guajiro. Ce phénomène est évoqué dans Perrin M., *op. cit.* [3] ainsi que l'évolution actuelle de la nosologie guajiro qui a tendance à se replier sur deux seuls diagnostics: *yolujasiraa* et *pūlajūwaa*.
  8. Comme semblent le prouver les annexes No. 1 et No. 2 présentées dans Perrin M., *op. cit.* [3].
  9. Voir Perrin M. *Le chemin des indiens morts, mythes et symboles guajiro*. Payot, Paris, 1976 (traduction espagnole: *El camino de los indios muertos*. Monte Avila, Caracas, 1980).
  10. En fait, beaucoup moins de 50% des femmes guajiro accouchent dans une maternité ou avec l'aide d'un médecin. Des informations concernant l'obstétrique et le tétanos néonatal chez les Guajiro sont données dans Perrin M., *op. cit.* [3].
  11. Voir Perrin M. *op. cit.* [3]: "cuarta parte: proyectos y programas".
  12. Ce point semble déjà acquis. Des séminaires fondés sur le travail cité en [3] devraient être organisés dès 1980 dans le cadre de l'enseignement universitaire destiné aux médecins-stagiaires affectés aux centres de santé des régions habitées par des Guajiro.

**Abstract**—After recalling the theoretical principles which underlie the traditional medical practices of the Guajiro Indians, the author gives a general picture of Western medicine as it is practised in the Guajiro environment, in Venezuela.

Having described the Indian approach, an inventory is drawn up and a brief analysis given of the factors which, according to the Indians' "state of acculturation", draw them either towards or away from the hospitals, or else leave them with an ambivalent attitude.

At the end of this study it appears that the divergences and incompatibilities between Guajiro and Western medicine are not only formal and material, but also social and theoretical. The problem of the relationship between the two medicines does not, therefore, have a simple solution in the present Guajiro context, but nevertheless certain steps should be taken urgently. It is necessary, in particular, for the Western practitioner working among the Guajiro to acquire an "anthropological consciousness" and a thorough knowledge of the native medical theory, even if only to ensure that the treatment he prescribes is applied and continued...



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## MEDICAL ETHICS IN CROSS-CULTURAL AND MULTI-CULTURAL PERSPECTIVES

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**Abstract**—Recent concern with medical ethics is confined almost entirely to Western nations and Western medical systems, and is inspired primarily by contemporary technological developments. Little attention has been paid in past research to the logical necessity that an effective ethics must assign priorities between coexisting values in situations where difficult choices must be made, nor has empirical research been carried out to determine whether the choices that are made reflect a consistent ordering of values in supposedly homogeneous Western societies.

Medical ethics have received little attention in comparative studies of medical systems, or in the cross-cultural transfer of medical knowledge and technology, where they may have major policy implications, as, for example, in family planning programs. Current ethical concerns in the West are dominated by the implications of new medical technology which may have little immediate application to non-Western countries, but such ethical questions as the allocation of scarce medical resources and the conflicts of obligations of healers to patients and other members of society must exist in all societies.

The processes by which patients and practitioners are socialized with regard to medical ethics and the formal and informal mechanisms for inducing conformity to ethical standards are poorly described in studies of non-Western medical systems. Other than the question of religious differences, studies of Western medical ethics have not considered cultural differences, and simply ignore the pluralism which exists in healing systems of Western societies. Studies of the ethical implications of medical pluralism in non-Western societies have yet to be made.

Aside from their inherent interest and potential importance for cross-cultural medical policy, comparative studies of medical ethics in cross- and multi-cultural context should yield important clues as to the structure of the moral order in complex and changing traditional societies. Case studies of medical ethical problems, observation of the processes of medical decision-making, descriptive ethnography of formal and informal methods of inducing conformity with medical ethical values, and questionnaires tailored to the particular culture should be particularly helpful in studying these phenomena.

### INTRODUCTION

Cross-cultural studies of medical systems have described underlying belief systems concerning causes and cures and particular modalities of treatment, and have related diseases to culturally patterned behavior. These studies have usually been much more concerned with medical arts and sciences than with the application of medical knowledge in practice. Studies of medical decisions in cross-cultural and multi-cultural situations have concerned themselves largely with selections made by patients between available medical systems, rather than the choices made by practitioners and their patients once the initial selection has been made. Relationships between coexisting medical systems have generally been looked at in terms of differences about causes or cures, rather than in terms of moral rectitude, but many of the most difficult decisions in the practice of medicine concern the question of what is the right thing to do.

Relatively little attention has been paid to the belief systems and associated organized behavior when medical decisions are made in the presence of conflicting values, either in culturally homogeneous or heterogeneous settings. Most studies of medical ethics have been made in Western societies within the context of orthodox Western medicine, and have assumed rather than examining the underlying bases of ethical or moral choices. Comparative studies of medical sys-

tems have tended to ignore the inherent differences between ideal and actual behavior, and the recurring necessity of making choices between competing values in real life. This paper outlines some of the potentialities of this neglected field of study in cross- and multi-cultural settings.

The recent proliferation of literature on medical ethics has paralleled the development of powerful and unprecedented technologies and rapid changes of the socioeconomic conditions surrounding medicine in Western countries. The developments and changes have included mechanical life support systems, organ transplants, biochemical birth control, mind altering drugs, rapidly inflating costs, and increasing participation of government and other organizations in the doctor-patient relationship. These altered conditions have exacerbated long standing ethical problems (e.g. distribution of costly or scarce medical resources, balance of responsibilities of physicians to their patients and to other parts of society), as well as creating new contexts for ethical concern (e.g. prenatal diagnosis of genetic defects and decisions to abort pregnancy).

Concern over the ethical implications of the new technology and socio-economics of medicine has not been accompanied by an equivalent increase, in the medical context, of awareness of ethical implications of cultural pluralism and cultural contact. This is surprising because of the more or less contemporaneous

increase in recognition in Western societies of the social importance of cultural pluralism and the associated differences in value systems, and the increasing number and proportion of "foreign" medical graduates practicing outside of their native countries. The only attention recent compendia and case books of medical ethics have shown to the multi-cultural dimension of medical ethical questions is an occasional reference to religious differences on specific medical procedures such as abortion or transfusion [1]. Although the issue of the "universalistic" vs "relativistic" nature of medical ethics has been raised [2], the range of relative differences which has generally been considered is extremely narrow. Medical ethics today are almost exclusively Western (Judeo-Christian), and based largely on the technocratic culture of the practitioners, not the patients [3].

We take as a working hypothesis that the high level of apparent agreement on the nature and content of medical ethics is a result of the diffusion of Western ethics with Western medical technology and medical social organization, rather than a cultural universal which is characteristic of all societies at all times. One type of evidence in support of this hypothesis is that in India codes of ethics for Western physicians and surgeons, nurses, dentists, pharmacists, homeopathic, Ayurvedic and Unani, and biochemic practitioners are all almost identical in wording, clearly modeled on the British medical example [4]. Non-Western systems of medical ethics have scarcely been looked for, nor, apparently, are they systematically used by the Westernized official medical establishments in non-Western countries.

Medical knowledge and technologies have been major exports of Western societies and the cornerstones of many international development assistance programs. Leaving aside the political and economic motivations which underlie bilateral and multilateral assistance programs, these exports of medical assistance have generally been assumed to be "humanitarian" without specific consideration of cross-cultural or multi-cultural ethical questions. One exception has been the proposal to apply triage decisions or "life-boat ethics" at the national level, i.e. the alleged necessity and propriety of not aiding some countries which appear to be in hopeless condition in order to give effective assistance to others [5]. Here again the ethical concepts are Western, and the discussion has involved technical experts from the donor nations but not the potential beneficiaries in recipient societies [6]. Constraints phrased in ethical terms, such as the prohibition of U.S. foreign aid funds for abortion have resulted from political considerations in the donor country rather than the moral response of potential recipients [7]. Medical ethics in cross- and multi-cultural contexts clearly have important policy implications.

#### MEDICAL ETHICS AND THE STUDY OF VALUES

The medical context is an appropriate one to study important values within homogeneous and heterogeneous cultural systems. Beyond the values themselves are questions of the socialization of practitioners and patients in the values and their appli-

cation, the formal social organizations created in professionalized medical systems, as well as the informal methods of ensuring conformity with particular value systems which exist in all cultures [8]. Medical situations are characteristically those in which decisions must be made and actions taken which affect or are believed to affect life and death, future well-being, substantial costs, etc. Because of the uncertainties which surround many of these actions, as well as the complexity of the events, decisions will often have to be made on the basis of balancing between values, rather than being determined "rationally" by purely technological constraints. Given the power of modern medicine, the problem is not only, as Fox has suggested, dealing with uncertainty in a technological decision [9], but also uncertainty as to which of several technologically feasible or possible objectives represents the "greatest good".

#### MEDICAL ETHICS IN HOMOGENEOUS CULTURAL SETTINGS

It has long been recognized that the power to heal or do good may also be the power to injure or do evil [10]. It has been recognized for just as long that the definition of good and evil may be difficult, and that there are painful problems of applying general rules in specific cases. Anthropologists have been concerned with the comparative study of values, and the cross-cultural or multi-cultural conflicts of values. In their studies, which have often been conducted at the ideal or hypothetical level, they have sometimes treated values within a given homogeneous culture as internally consistent and absolute. They have generally neglected to consider the problem of value conflicts inherent in any system which attempts to maximize simultaneously more than one principle [11]. This constraint on simultaneous maximization means that there are commonly circumstances in the context of medical care in which a decision to maximize one value will necessarily be a decision to downgrade others, even in relatively homogeneous cultures.

#### ANTHROPOLOGICAL STUDIES OF MEDICAL ETHICS

The subject matter of medical anthropology, as a branch of human ecology [12], necessarily involves biology, because it deals with illness and response to illness, but it also necessarily involves structured interactions between people. This is particularly important as regards responses to illness, because serious illness implies dependency, and it follows that there will be a more or less passive "patient" and often a more or less active "guardian", as well as the more or less specialized "healer".

To date medical anthropological studies in cross-cultural or pluralistic settings stressing the socio-cultural aspects have dealt with such subjects as cultural differences in definitions of illness and health, diagnostic systems and the social organization of healing, especially the healer-patient relationships. Those studies concerned with the biophysiological aspect have dealt with the interaction of human biology and human diseases, and the epidemiological implications of human behavior. Although there has been an

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increasing interest within the Western medical profession in the topic of medical ethics, this subject has only occasionally been described in a non-Western medical system [13, 14]. This is a surprising omission because of the key position of ethics, as statements of values, in mediating between the more or less purely technological and the socio-cultural aspects of healing behavior, and in the making of medical decisions.

Dictionary definitions may serve as a starting point for our discussion of the implications of the study of medical ethics in cross-cultural and multi-cultural perspective. The word ethics comes from the Greek *ethikos*, from *ethos*, meaning custom or habit, but the word is usually applied to systems of moral principles. Medical ethics are defined as principles of medical conduct, duties a physician owes to himself, his profession and his fellow man. The most frequently cited classical statement of Western medical ethics is found in the Oath of Hippocrates [15], which comes from Pythagorean sources. Though incomplete and partially outmoded, it is worth recalling what that statement includes in terms of the obligations of the physician. These may be paraphrased as follows.

Obligations to the profession:

(a) to establish a kinship-like bond of respect for medical teachers equivalent to that of respect for own parents, including support in time of need (i.e. extend professional courtesy to other physicians and their families);

(b) to teach the children of one's teachers without fee (primary duty of doctors as teachers);

(c) to teach medical students only bound by the laws of medicine (i.e. the medical profession is self-regulating).

Obligations to patients:

(a) to treat for the benefit of the patient, and abstain from harmful or mischievous treatments (i.e. refrain from study or experimentation of no benefit to the patient);

(b) neither to give nor suggest the giving of deadly medicine (i.e. not to perform nor advocate euthanasia);

(c) neither to give nor suggest the giving of abortifacients.

Obligations of practice:

(a) to perform only those operations for which trained (and refer those requiring special treatment to specialists);

(b) to abstain from doing harm incidental to practice;

(c) to abstain from seduction of patients or their family members.

Obligations to self:

(a) to maintain secrecy concerning what is learned about individuals during or outside the course of practice (i.e. refrain from gossip).

This is obviously more (and less) than a statement of moral principles since it stresses obligations to the profession (especially as regards teaching and self-regulation) and to the members of the profession even above obligations to patients; it sets the profession aside from the rest of society; it has little specificity with regard to treatment of patients, except doing good, avoiding harm, and not causing or advising death. The statement is silent on the obligations of physicians to treat actively if not specifically

requested to do so (Good Samaritanism), and does not require them to respond to all requests for treatment nor does it require action to regulate the behavior of other members of the profession. Perhaps more important, the statement is silent on how to decide in specific cases between two desirable but mutually exclusive goals, each of which may be technically feasible. The choices faced by healers must always have been more complex than implied in the Hippocratic Oath, and have become increasingly so with the development of modern medical technology, the widening scope of activities assigned to the medical profession, the proliferation of different kinds of medical workers, and the increased possibilities of cultural heterogeneity among health workers and between health workers and patients.

Anthropological studies have not systematically examined the values involved in making decisions and choices in the practice of healing. Studies of multiple or plural medical systems have emphasized the choices made by patients or their surrogates in search of care, and perhaps the evaluation of the patients of the efficacy of that care or its convenience (patient satisfaction), but not its moral rectitude. The studies have rarely concerned themselves with questions of the healer's moral evaluation of mode of treatment, whether to treat or not, what goal to try to reach, once the patient is in his hands.

In medical anthropological studies, there seems to be an unstated and unspecified model of "health man" analogous to the models of "economic man", "hedonistic man", "political man" or "territorial man". This implied model suffers at least as much from problems of over-simplification as do these other unidimensional models of motivation. The unstated assumption is that people always act (or should act), as patients, guardians or healers, to maximize their own health, the health of their wards, or the health of their patients, that the definition of health is unambiguous, and that the health (or illness) of patient, guardian or healer has no implication for anyone else's health.

Once stated as baldly as this, the faults of the model become apparent, and the possibilities for systematic elaboration and expansion can be seen. Stated in terms of maximization, the model is clearly oversimplified, first because of the overlap of health with other motives and facts of life such as economic and social values and constraints; second, because of the multidimensional nature of most definitions of health (including long life, adequate functioning, usefulness of life, and absence of pain and suffering) it will be impossible to maximize all of these goals simultaneously in most non-trivial situations; and third, because of the multiplicity of actors in many healing situations, there will always be at least the potential for conflicts in evaluation apart from the impact of individual circumstances of the case. Because medical phenomena recur, the ethical content of medical decisions can be studied systematically. Thus the important values involved can be identified and ranked in the circumstances in which they are employed.

The potentials for value conflicts where there are coexisting plural or competing systems is obviously much greater than in homogeneous cultural systems. The study of decision making in the context of healing is thus an important tool for investigation of the



operation of value systems, in the development of more adequate models of health-seeking behavior, in understanding the operation of the health profession, and with regard to more general questions of the obligations for and constraints on interactions in the society at large. The circumstances under which the choices and their underlying evaluations may change are also of interest. The ethical evaluations of such things as birth control, abortion, "death with dignity", etc. have obviously been changing in Western societies. Apparently this is in association with changing socio-economic and demographic conditions, and in response to the development of new technologies. These open new possibilities for treatment, imply new concepts of social responsibility, change the balance between risks and benefits, and may result in new definitions or new understandings of the definitions of life and health. Moreover, they might be expected to respond to broader scale changes in society, such as the deemphasis of family and kinship and the development of functionally specific professions and bureaucracies.

#### ETHICAL ISSUES IN WESTERN MEDICINE

Given the dearth of comparative studies of non-Western medical ethics, we may start looking for ethical conflicts and bases of choices with some examples from the West [16]. These may be listed as follows:

##### *Regulation of the profession*

1. Problems of professional incompetence (e.g. failure to diagnose or treat according to current accepted professional standards, failure to refer specialized problems and procedures to specialists). In the event of unfavorable outcome, these may lead to charges of malpractice as well as unethical behavior. Enforcement raises the question of the responsibility of other technically qualified medical personnel (in the absence of knowledgeable complaints from patients or their guardians) to investigate or alert patients or professional associations to possible incompetence beyond initial requirements of licensing and admission to practice.

2. Unnecessary treatment, operation or medications which are not conducive to the patient's health (including use of outmoded treatments or those which have not been demonstrated to be beneficial).

3. Selection of the appropriate reference group or body for ethical decisions (individual physician, peer group, laity, religious advisors, legal officers, etc.).

4. Participation of the government in prescription or proscription of treatment (e.g. what drugs should, may, or may not be used, what operations should, may, or may not be performed).

##### *Individual vs social obligations*

5. Choice between individual rights and the needs of society, e.g. as regards research and training of benefit to the profession and potential benefit to other patients, vs possible benefit or harm to the patient; as regards immunization against contagious diseases in which herd immunity is an important part of the public health strategy, but the immunization has a finite risk for the individual; restriction of behavior believed

to be hazardous or costly to the individual and to others (e.g. smoking, drug addiction, drinking, reproducing), regardless of individual preferences [17].

6. Choice between the patient's needs and desires (e.g. for privacy, for death to end suffering) and the legal obligations of physicians (e.g. volunteering knowledge of a patient's criminal offense, refusing a suffering terminal patient's request for a painless but illegal death).

7. Choice between the patient's needs and desires and the social obligations of the physician (e.g. what is the responsibility to unwed young teenage patient and to patient's guardians if the patient wants birth control or an abortion).

##### *Obligation of the practitioner to take action*

8. Choice between the physician as an active advocate and giver of preventive or curative medicine, vs waiting to be asked for services, e.g. in an epidemic, or in a roadside accident; obligation to provide services to a person whose life is threatened, but who does not want the services for religious or other reasons.

9. Obligation of physician or medical institution to treat needy patients upon request, regardless of risk of financial or legal responsibility.

##### *Allocation of scarce resources*

10. Basis of choice for triage decisions regarding the allocation of scarce resources among potential recipients of treatments, e.g. transplantation from scarce donors, use of scarce kidney machines, use of scarce medications, use of scarce medical personnel or time when others need the same services.

11. The prolongation of "useless" life through heroic measures or life support systems when there is no chance of return to normal functioning.

##### *The right to know*

12. Obligation of the physician to obtain fully informed consent from the patient or patient's guardian for potentially hazardous or harmful treatment.

13. Obligation of the physician to inform the patient or patient's guardian that the patient's conditions is believed to be terminal.

Obviously some of these specific issues have arisen largely as a result of the development of modern medical technology, but the general categories may be found in most medical systems, regardless of their level of technological development or professionalization, their concepts of disease prevention and cure, their concepts of evidence of efficacy of treatment, or their beliefs in what is medically possible. For example, problems of allocation of scarce medical resources (or the allocation of scarce resources for therapeutic purposes) probably recur in all societies, but they will be handled in different ways. To the extent that it is believed that there are alternative methods of treatment with different outcomes, there will always be questions of choice among goals for the health of individuals, such as long life, freedom from pain, physical beauty and wholeness, or ability to function normally or usefully. Is it true for example, that under some circumstances all societies accept the idea that life may not be worth living? If so, under

what conditions is this decision made, and who makes the decision?

To the extent that there is belief in contagion or spread of disease from one individual to another, there will always be a potential conflict between individual (or kin group) versus public health, and there will also be the potential question of the obligation of the healer to treat when by doing so he may physically endanger himself. Most, or perhaps all, societies have concepts of public health, whether in the form of control of witchcraft, control of movement of disease-transmitting people, or control of behavior or materials believed to cause disease. At what point, and to what extent is it socially acceptable or socially required to interfere with someone's behavior in order to preserve the public health? To what extent is an individual, his guardian, or society at large obliged to seek or be constrained from seeking, urging or providing care for an illness which is not believed to be contagious? This is probably a generally recurrent issue of ethical concern. Under what conditions will a guardian, a healer, or a socially responsible body step in to provide care even if not asked to do so, or if asked not to do so?

Ethical issues which may not be universal, which probably relate to the degree of professionalization of the healing art, probably include questions of professional behavior of healers toward each other and toward society at large. In this regard it would be interesting to examine the formal or informal relationships between non-professional or non-scientific healers: do they criticize, publicly or privately, each other's ability to heal; do they reveal their patient's secrets; are they under obligation to treat patients regardless of lack of payment, potential liability or other risk to themselves; do they refuse to take actions believed to be harmful to their patients' or their clients' enemies, regardless of the requests of their clients? What are the evaluations of their actions, and what recourse do healers, or society at large have if they disapprove? To what extent are healers held responsible for their failure to heal or for errors in their attempts to heal?

Ethical issues which have different meanings in different cultural settings concern such things as individual rights to and needs for privacy. The situation is quite different in two systems where individual transgressions of taboos (e.g. incest) are believed to result in illness, but where cure is believed to require public disclosure and community action, as compared with societies where it is believed necessary and proper to protect that individual's privacy once the healer has been informed.

We have already suggested that ethical differences may have important policy implications in international health programs. They are also of immediate practical importance to cross- and multi-cultural researchers because of the now near universal requirement by research funding and sponsoring agencies for "informed consent" and conformity to the ethical standards of both the funding agency and the locality where the research is conducted. Clearly the research subjects must be protected against biological and socio-psychological risks of the research, but whose estimate of risks and benefits is to prevail when the ethical principles do not agree?

#### METHODS OF STUDY, RESULTS AND SPECULATION

Ethical conflicts in the context of medical care may be among the most painful, difficult and bitter events in situations of relatively peaceful cultural contact, since they literally involve matters of life and death, plus very strongly held beliefs about propriety. Because these situations often involve choices between competing values they give the opportunity of studying the ranking of values where decisions have to be made. The most commonly employed method for study of ethical questions in modern Western medical settings has been the use of questionnaires which pose hypothetical questions, the nature or order of which is used to infer a rough ranking of the strength and order in which certain moral convictions are held. An example of this sort of questionnaire is that used for repeated surveys among members of the American Academy of Pediatrics [18]. Multiplicity of cultural backgrounds of physicians and patients (or guardians) is recognized in these surveys, for example in questions on the conditions under which abortion should or should not be considered to be infanticide, and on the treatment of patients whose guardians are Jehovah's Witnesses (and therefore reject blood transfusions as an abomination) or believers in faith healing (who reject the use of surgery). Other questions attempt to delineate the conditions under which repair and life support should be given or withheld from congenitally malformed infants, the degree of responsibility to be exercised by the physician in urging or taking a course of action in these cases, and the conditions under which a physician should appeal to others (e.g. a committee, a law court) for assistance or shared responsibility if there is a possibility of a conflict.

This type of questionnaire could be adapted for use cross-culturally, in situations where physicians trained in the Western tradition practice in non-Western societies. Questionnaires given to physicians trained in the Western tradition in Thailand, for example [19], investigated the response to requests for abortion, which is generally recognized to be considered sinful in Buddhist thinking. Such surveys have not gone into the fine points of physiology implied by detailed questions on the trimester in which the abortion might be done, or the demonstration of fetal genetic defects through amniocentesis as a justification for abortion. My impression from unsystematic discussions of this sort of question in Thailand is that in practice Western trained physicians would be more concerned about legal than about moral implications of performing what is in Thailand under most circumstances an illegal procedure. Likewise, as regards questions of who should make the decisions, I believe the Thai physicians would be much more likely than American doctors to consider themselves competent to decide, once the patient is in their care, without inviting the participation of guardians for anything more than rudimentary consent, and certainly without asking for committee, court, or legislative action. I believe Thai physicians would be less likely than American ones to agonize over questions of whether to treat or not treat if the patient had not been specifically placed in their

care (they would not, I believe, intervene unless asked to do so for a specific ailment). In fact, this is probably the characteristic which has been most frequently commented upon by American physicians when exposed to the Thai practice of Western medicine. This is usually expressed by American doctors as "failure to take the initiative" which many American physicians believe it is proper to take.

It is unlikely at this stage of knowledge that we are prepared to write adequate questionnaires to investigate cross-cultural ethical medicine phenomena or ethical conflicts in societies with plural medical systems. It may be useful to investigate the topic of medical ethics by looking at "trouble cases" (as suggested in the anthropological study of law and in case books of medical ethics) and by participant observation or intensive interviewing (i.e. the collection of gossip after establishing good rapport).

Investigation and analysis of "trouble cases" is important for two reasons—first, a thorough investigation not only indicates the nature of the value conflicts and identifies the parties to the conflicts, it also indicates the formal mechanisms for their resolution, thus giving information on social structure as well as value aspects of the problem. Anthropological studies of medical systems have generally not covered the question of "ethics committees" or their analogs, nor have they considered the interaction of medical practitioners and medical practice with the law, the courts or other bodies charged with upholding the public morality. The problem with using this method in Thailand (and perhaps in other areas) is that most cases never come to the attention of the courts, but are resolved informally. According to one informant, medical ethics cases in Thailand are very rare, and deal mostly with plastic surgery operations in which the patients feel the results were not as promised. Perhaps collection of trouble cases would be more profitable as a source of information in more litigious societies [20].

At this stage in our knowledge, I believe the traditional anthropological methods of close observation and intensive interviewing to follow up leads would be more productive. In addition to the apparent value conflict mentioned above between American and Thai practitioners of Western medicine, I believe American medical personnel would also generally differ with their Thai colleagues as regards the penchant of many Thai physicians for giving injections. American physicians criticize this on two grounds: (a) the injection may be unneeded, of unproven therapeutic value, or possibly deleterious to the patient (in the case of injections of saline, vitamins or chloramphenicol), and (b) having long run negative epidemiological effects (e.g. in the case of injections of dosages far below the amount needed to cure without producing drug resistance). For the Thai practitioners the rationale seems to be that the patients expect and desire injections and would feel untreated if they did not receive them, and that it is better to give *some* antibiotic rather than refusing to give anything but an adequate dose (which the patient might not be able to afford). Thai practitioners also justify the frequent use of injections of antibiotics on the grounds that they have no laboratory facilities for adequate diagnosis of causative organisms, and that by giving an injection they will be

certain the patient receives some drug in a situation where follow-up visits are very unlikely. These examples suggest that the definition of "ethical" medicine will depend on the circumstances in which it is practised as much as on the techniques or traditions employed. They also suggest the need for understanding the bio-physical implications of treatment regimes as well as their social structural milieu.

Overt ethical conflicts between plural medical structures seem not to occur in a purely Thai setting (as contrasted with a mixed Thai-Western situation). This seems to be a reflection of a general agreement to allow everyone to do pretty much what they want to do without direct interference, unless that interference is requested or unless the actions are causing immediate harm to others. Thus although Western-trained Thai physicians may denounce "quacks", they are unlikely to abandon their patients if they seek advice or treatment from other types of practitioners (traditional Thai doctors using "ancient" medicine, doctors who diagnose or treat by spirit possession, Buddhist priests who use other varieties of traditional medical texts or prayers, spirit doctors who make offerings to spirits in the belief that they have caused illness because of some taboo violation, nor even self-medication using drugs procured from a modern pharmacy). American physicians may view this *laissez-faire* behavior as a failure on the part of the Western trained Thai physicians to carry out their role as teachers *vis-à-vis* their patients. Where such conflicts do exist they are most likely to be with respect to some Christian missionary-affiliated medical personnel who are openly morally offended about beliefs in superstitions.

As regards the ethical principles of non-Western varieties of healers, ethical principles are known to exist in more or less codified form in religio-medical tests [21], but these have rarely been systematically explored. Some aspects of professionalism exist in the sense implied by the Hippocratic oath with regard to teachers and their students of *katha* (spells, incantations), in that students are supposed to respect their teachers, but such practitioners seem to be under no moral obligation to behave (or refrain from behaving) in various ways. At least some of their clients believe that on request, such practitioner's will cast malevolent as well as curative spells. No hard data are available regarding the ethical aspects of the traditional practice of abortion, known to be relatively common but to date refractory to anthropological or epidemiological investigation. Abortion seems to be regarded as immoral, but it is widely practiced, and therefore it must be rationalized by some patients and practitioners as justifiable under some circumstances. Exactly what these circumstances are, and how the practice is rationalized by practitioners as well as patients is a subject for further research.

#### CONCLUSIONS

Medical ethics is an unexploited field of investigation for comparative study. Ethical decisions involve not just weighing what is possible, but also balancing among decisions of choice among different definitions of what is good for the several parties to the medical transaction (patient, healer, guardian, society at large).

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Thus the study of such decisions can help to assign weights or priorities to various strongly held values. The ways in which these value conflicts are resolved will also provide evidence for the description of social order and social change, for example the dominance of technological qualifications over kinship in determining who shall decide a course of action, or the relative tolerance or intolerance for pluralism.

To date the study of medical ethics has been almost entirely a study of Western ethics, increasingly dominated by a concern for the ethical implications of recent developments in medical technology. As we become more conscious of the techniques and underlying beliefs of non-Western medical systems, so too we should investigate the moral principles underlying medical decisions. This is particularly appropriate as we come to recognize the importance of cultural pluralism in Western as well as non-Western nations. Studies in societies which have long lived with cultural pluralism may suggest new ways of handling or avoiding ethical conflicts which exist in all medical systems (problems of the allocation of scarce medical resources, relative weights of obligations to patient, family and society, etc.), as well as ways of dealing with the ethical questions which continually arise as Western medical innovations are introduced into non-Western societies [22].

#### REFERENCES

1. See, for example, Mendelsohn E., Swazey J. P. and Tavise I. (Eds) *Human Aspects of Biomedical Innovation*. Harvard Univ. Press, Cambridge, MA, 1971; *Ethics in Medicine: Historical Perspectives and Contemporary Concerns*. The MIT Press, Cambridge, MA, 1977; Tancredi L. R. (Ed.) *Ethics of Health Care*. National Academy of Sciences, Institute of Medicine, Washington, D.C., 1974; Veatch R. M. *Case Studies in Medical Ethics*. Harvard Univ. Press, Cambridge, MA, 1977.
2. E.g., Veatch R. M. Medical ethics: professional or universal? *Harv. Theolog. Rev.* 65, 531, 1972.
3. Much of what is called medical ethics, especially as codified, is perhaps more properly described as professional etiquette, since it refers largely to relationships between professionals, not the resolution of value conflicts in practice. Cf. Jonsen A. R. and Hellegers A. E. Conceptual foundations for an ethics of medical care. In *Ethics of Health Care* (Edited by Tancredi L. R.), esp. pp. 6-7, *op. cit.*
4. See Mehta H. S. *Medical Law and Ethics in India*, Chap. III. The Bombay Samchar Private, Bombay, 1963.
5. For the pro view, see Hardin G. Living on a lifeboat. *BioScience* 24, 561, 1974; for a response, see Murdoch W. W. and Oaten A. Population and food: metaphors and reality. *BioScience* 25, 561, 1975.
6. It is not clear that normal Western medical ethical procedures have always been applied in these programs. Medically dominated population programs which have resulted in the sustained administration of powerful drugs on an unprecedented worldwide scale have been concerned with efficacy and acceptability, while little attention has been paid until recently to health side effects (if any), in women who are often undernourished and environmentally stressed in ways not common in Western populations, where the contraceptives were developed and have been administered under the most rigid medical control and supervision. Despite cautionary statements by WHO in the early 1960s, when the mass birth control programs were starting in developing countries, the number of empirical epidemiological studies on the health effects of steroidal contraceptives in such countries is vanishingly small. WHO-sponsored studies in developing countries on the interactions of steroidal contraceptives and nutrition and retrospective studies on steroidal contraceptives and cancer are still in the data-gathering stage. Attempts at computer modeling of the morbidity and mortality associated with contraceptives in developing countries make use of epidemiological data from the U.S. and Britain. See Potts M., Speidel J. J. and Kessel E. Relative risks of various means of fertility control when used in less-developed countries. In *Risks, Benefits, and Controversies in Fertility Control* (Edited by Sciarra J. J., Zatuchini G. I. and Speidel J. J.), pp. 28-51, esp. pp. 29, 33-34. Harpers & Row, Hagerstown, MD, 1978. The recent studies which show little or no association between cardiovascular disease and oral contraceptives have dealt only with women from Europe, North America, Australia and New Zealand. See Tietze C. The pill and mortality from cardiovascular disease: another look. *Family Plann. Perspectives* 11, 80, 1979; Belsey M. A., Russell Y. and Kinnear K. Cardiovascular disease and oral contraceptives: a reappraisal of vital statistics data. *Fam. Plann. Perspec.* 11, 84, 1979.
7. Countries where abortion is an important means of birth control and where it is performed primarily by medically unqualified persons using non-sterile techniques have high rates of maternal morbidity and mortality and report problems in subsequent childbearing for women who have undergone abortions. Where abortions are performed by modern sterile methods, maternal morbidity rates and rates of subsequent reproductive problems are extremely low. For effects of abortions in a non-Western population see Daling J. R. and Emanuel I. Induced abortion and subsequent outcome of pregnancy. *Lancet* July 26, 170, 1975; for a review of other studies of effects of abortion see Maine D. Does abortion affect later pregnancies? *Fam. Plann. Perspec.* 11, 98, 1979.
8. Socialization of Western medical students was the subject of a number of studies in the 1950s, which have been summarized by Fox R. C. Is there a "new" medical student? In *Ethics of Health Care* (Edited by Tancredi L. R.), pp. 197-220, *op. cit.* The question of socialization of patients has been discussed most frequently in studies of psychiatric treatment in Western societies, e.g. Goffman E. *Asylums: Essays on the Social Situation of Mental Patients & Other Inmates*. Aldine, Chicago, MI, 1961.
9. Fox R. C. Training for uncertainty. In *The Student Physician* (Edited by Merton R. K. et al.). Harvard Univ. Press, Cambridge, MA, 1957.
10. E.g., in the Ayurvedic context, "as sharp instruments, caustics and thermal cautery are great weapons of death, the surgeon should use them very carefully with a balanced state of mind". Quoted by Vrddha Vāgbhatta (Elder) and Sūtra Sthānam, p. 274 in Singhal G. D. and Gaur D. S. *Surgical Ethics in Ayurveda*, p. 63. The Chowkhamba Sanskrit Series Office, The Chowkhamba Sanskrit Studies Vol. LX. Varanasi, 1963.
11. Hardin G. The tragedy of the commons. *Science, N.Y.* 162, 1243, 1968. Considering ethical choices with regard to population policies is one of the few people to recognize this logical constraint explicitly, citing as his reference von Neumann J. and O. Morgenstern. *The Theory of Games and Economic Behavior*. Princeton Univ. Press, Princeton, NJ, 1947. Ramsey P. [Commentary: Jonsen and Hellegers. In *Ethics of Health Care* (Edited by Tancredi L. R.), p. 23 *op. cit.*]



- has mentioned the importance of ranking values in making ethical medical decisions, but does not develop the notion.
12. Kunstadter P. The comparative anthropological study of medical systems in society. In *Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies* (Edited by Kleinman A., Kunstadter P., Alexander E. R. and Gale J. L.) pp. 683-695. U.S. Department of Health, Education, and Welfare, DHEW Publication No. (NIH) 75-653, Washington, D.C., 1975.
  13. E.g., Mehta H. S. 1963, *op. cit.*; Singhal, G. D. and D. S. Gaur, *op. cit.*; Unschuld P. U. *Medical Ethics in Imperial China: A Study in Historical Anthropology*. Univ. California Press, Berkeley, CA, 1979.
  14. Janzen in his detailed study illustrates conflicts and accommodations between Western and traditional medical systems and their practitioners, and suggests some of the values involved (therapeutic value for the patient vs income for the practitioner), but does not explore systematically the ethical structures of the two systems or the effect of their interaction. Janzen J. M. *The Quest for Therapy in Lower Zaire*, e.g., p. 60, p. 216. Univ. California Press, Berkeley, CA, 1978.
  15. The well known oath is accompanied by a series of other writings attributed to Hippocrates which spell-out in more detail prescriptions for the dignity and decorum of physicians, relationships between consulting doctors, the charging of fees based on ability to pay, etc. and proscribing the treatment of apparently hopeless dying patients. See Jones W. H. S. (Translation). Hippocrates. In *The Loeb Classical Library*, Vol. 1. Harvard Univ. Press, Cambridge, MA 1923, reprinted in *Ethics in Medicine* (Edited by Reiser S. J. et al.), *op. cit.* pp. 5-9.
  16. This overall categorization roughly parallels that of Veatch R. M. 1977, *op. cit.* Cf. outline for Part II.
  17. Use of psychiatric treatment for control of "political" rather than "pathological" behavior may also fall into this category.
  18. Questions used in the periodic survey of the Surgical Section of the American Academy of Pediatrics include the following. "1. Do you believe that the life of each and every newborn infant should be saved if it is within our ability to do so?" "7. If you agree that under certain circumstances it is permissible to allow certain severely damaged infants to die by withholding surgical treatment, list the criteria for making such a decision in order of priority (most valid as 1, least valid as 5); (a) infant's probable IQ; (b) potential quality of life (as child and adult); (c) cost to society (hospital care, institutionalization, special therapeutic programs); (d) possible adverse effects on the family (psychological, social, financial); (e) parents' willingness to raise the child at home." "12. Do you agree with those who believe that many children with Down's syndrome are capable of being useful and bringing love and happiness into the home?" "15. Does your management of infants who have Down's syndrome and intestinal obstruction reflect concern for (number in order of priority so that the highest is 1) (a) the infant; (b) the infant's family; (c) society at large?" "16. When do you consider abortion infanticide: (a) never; (b) only after the first trimester; (c) only after the second trimester; (d) only if the fetus is normal; (e) only if the fetus is not a threat to the life or health of the mother; (f) always; (g) no answer?" "18. You are prepared to perform elective major surgery on a Jehovah's Witness child whose parents desire surgery but refuse to allow blood transfusions. The parents have signed the standard release, freeing you of liability in the event the infant bleeds to death. Would you (a) refuse to operate; (b) get a court order allowing blood transfusions before proceeding with surgery; (c) proceed with surgery and give blood transfusions if needed without a court order; or (d) completely respect the parents' wishes by operating but not giving blood even if the child exsanguinates?" "19. If your patient were a young child with a potentially resectable malignant tumor whose parents refuse to allow an operation because of a belief in faith healing, would you (a) send the child home; (b) get a court order directing surgery; (c) try to persuade the parents to allow radiotherapy or chemotherapy; (d) other?" Quoted from Shaw A., Randolph J. G. and Manard B. Ethical issues in pediatric surgery: a national survey of pediatricians and pediatric surgeons. *Pediatrics* 60, 588, 1977.
  19. Varakamin S., Devaphalin V., Narkavonkit T. and Wright N. H. Attitudes toward abortion in Thailand: a survey of senior medical students. *Stud. Fam. Plann.* 8, 288, 1977.
  20. Mehta H. S. 1963, *op. cit.* cites a number of ethics cases in India involving both Western and non-Western types of practitioners. Rulings and precedents refer to Western medical law and cases (British, Scottish, American), with no reference to relevant Indian customs.
  21. E.g., Singhal G. D. and Gaur D. S. 1963, *op. cit.*, and Unschuld P. U., 1979, *op. cit.*

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